

AUGUST, 1953

# the American Perfumer

## and ESSENTIAL OIL REVIEW

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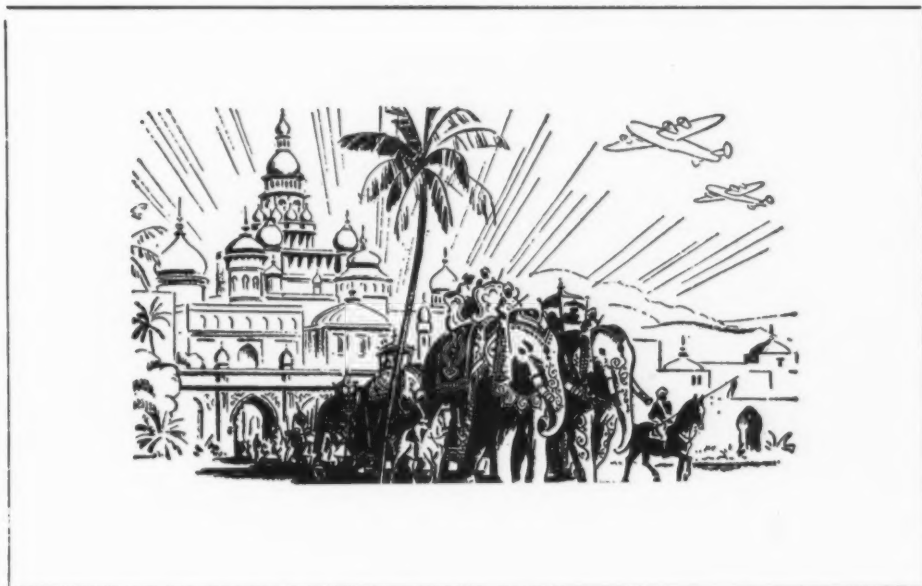
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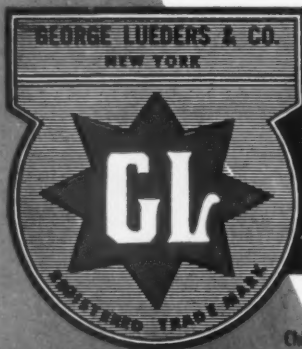
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# the American Perfumer and ESSENTIAL OIL REVIEW

COSMETICS • SOAPS • FLAVORS

Established 1906

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# THE LABOR RELATIONS WORK *of the T. G. A.*

**T** EVERY SEASON of the year seems to be the season for discussion of Labor relations problems. However, more such discussions, friendly and otherwise, seem to take place in mid-summer. Perhaps it's the heat or the humidity. Human cussedness always seems to be at its best—or worst—during the month of August.

**T** WHICH REMINDS US of the Labor Relations Service of your Association. Your officers, directors and staff have always been acutely aware of the problems which, in the nature of things, must arise between employer and employee. In a modest way we have always done our best to make the cosmetic industry a fine one in which to work. We have tried in a quiet way to improve working conditions and hours of employment, and to stimulate the payment of wage scales just a shade better than those existing in the average industry. We have not been crusaders but we have tried to be forward looking and constructive.

**T** FOR THE LAST SEVERAL YEARS, we have had on our staff one of the best labor relations experts in the country. John Patterson Currie's council and advice to the Association and to individual members as well has contributed markedly to the cause of better employer-employee relationships in the industry as a whole and in many cases. This service, excepting in cases where Labor relations Council is called upon to perform individual services of a time-consuming nature, is paid for from Association funds and comes to each member as one of his regular privileges of membership. Every member is free to, and should, take the fullest advantage of it.

**T** THE ASSOCIATION annually makes a detailed survey of wages, working conditions and employee benefits existing in the industry from Coast to Coast. The report of this survey is in the hands of active members in mid-summer. It has been widely accepted by employee groups and by Government authority, as well as by industry members, as an authoritative and accurate summary of labor conditions in the industry. The job classifications worked out by the Association for this survey have been accepted by industry, employee groups and Government as the standard for the toilet goods industry, and the findings in each annual survey have done much to avoid long and costly disputes as to prevailing rates and conditions, which often are so troublesome in industries not having such a service.

**T** THIS IS A SERVICE available to every member of the TGA. It is another example of the many services which are, perhaps, of even greater value to the "little fellow" than to the "big fellow".



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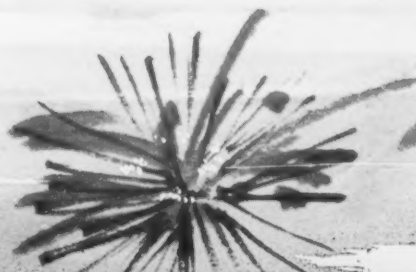
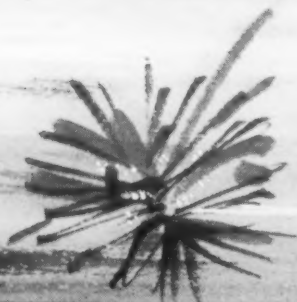
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# Desiderata

BY MAISON G. DENAVARRE, F.A.I.C.



## F.D.A. and Coumarin

A press release from former contemporary trade paper editor, Wally Janssen, now working for the United States Department of Health, Education and Welfare, Food and Drug Administration, tells us that the F.D.A. is pleased with the voluntary withdrawal of coumarin as a flavoring agent. All this because recent pharmacological tests raised a question regarding its safety and it was the manufacturing chemist who withdrew the substance from sale for use in flavors and foods.

This is another case of substance in long use, suddenly discovered to be dangerous. As a result, everyone awaits the actual scientific report on which this withdrawal was made, for to withdraw it from such use, the substance has to be pretty toxic because of the minute concentration present when used as a flavoring agent in foodstuffs.

The flavoring industry started a program of this type on its own some years ago but not too much has been discovered to date. The new coumarin withdrawal will undoubtedly stimulate more of this work.

## Liquid Lanolin

This department is indebted to reader Wagner for some observations on liquid lanolin which were made in a reply to Inquirer No. 1012 in the May issue. The statement made was that "there is no permanent liquid form of lanolin —." "Wanna bet," says reader Wagner.

He describes two of his own products, one of which is a perma-

nent liquid, oil-soluble form of pure lanolin that confirms with all U.S.P. specifications for lanolin, excepting for melting point. Then he describes another item made by his house which contains approximately 50 per cent liquid lanolin in crystal clear, permanent, liquid, oil-soluble form.

One could argue the point all over the lot but unfortunately the abbreviated reply to the inquirer which appeared in THE AMERICAN PERFUMER did not make it clear that we told our reader that he just couldn't take ordinary lanolin and dissolve it in something and get a permanent clear liquid. That still goes, excepting possibly for the patented product which we referred to. The latter is not a clear liquid even so.

This department is always happy to stand corrected or to be advised and is delighted to get such information.

## More on Coumarin

Just where things will end up in conjunction with the use of coumarin in flavors and in such perfumes as are used in lipsticks, no one knows. At the moment there are some facts, but their translation and reproducibility are being studied. As a result, most perfume and flavor houses, catering to the trades mentioned, are no longer using coumarin except on specific order by the customer.

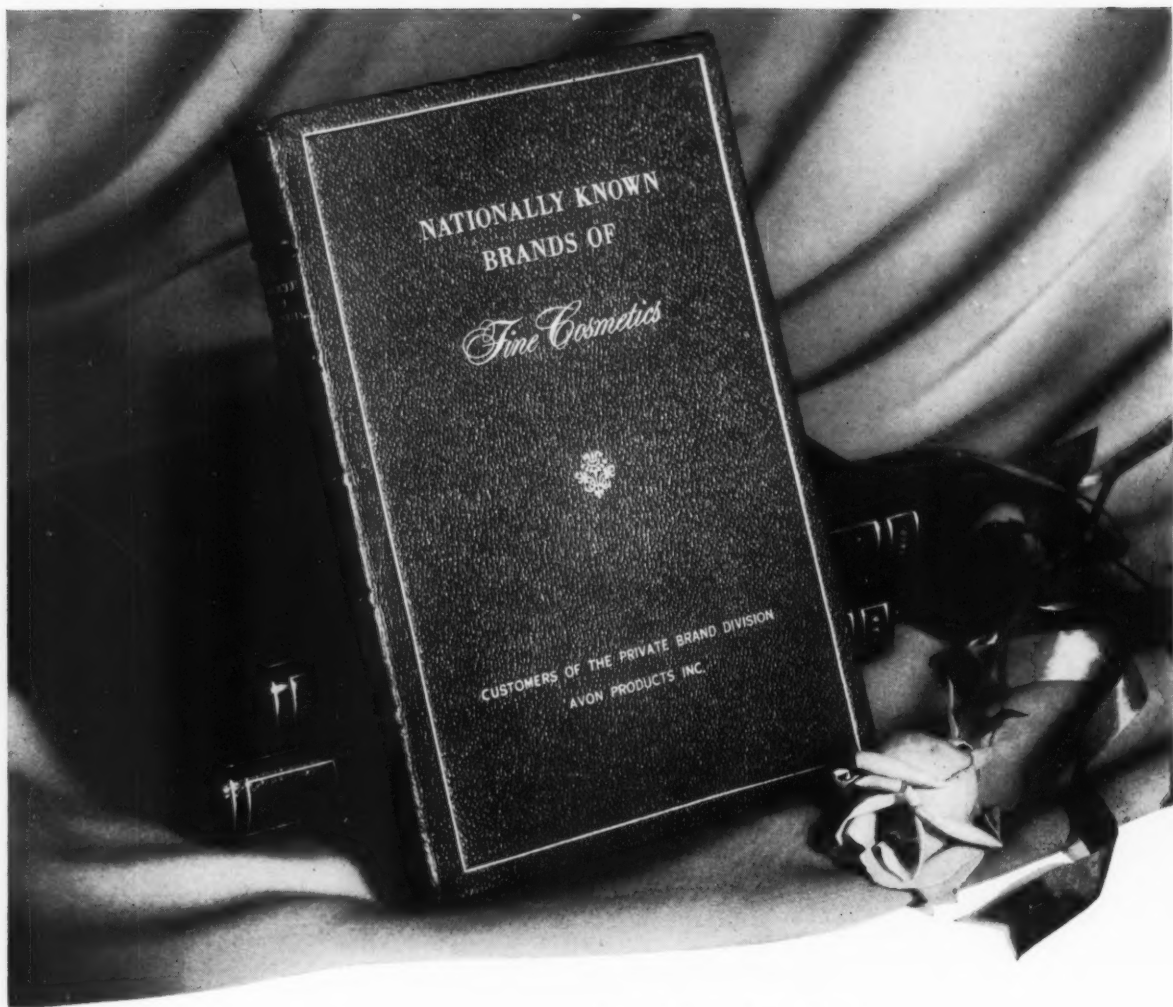
## Notes

Elderly people promise a good market for special products suitable for ages 45-65 and over . . . can't be too high priced . . . at this age people are more practi-

cal. . . . Infrared curves of PURE Southern Oil wintergreen and methyl salicylate are interesting to observe when one is super-imposed on the other. . . . Rothman claims that esters of p-aminobenzoic acid are inferior to PABA as a sun screen.

. . . . Reporting on fifteen well-known suntan products on consumer market, *Kesten & Slatkin* (Arch. Dermatol., March, 1953) found two showed poor U.V. absorption in the range 2900-3200Å—one was a PABA ester and the other a hydroquinone derivative . . . other PABA esters showed up well—so, maybe it is a matter of concentration. . . . Thorium X, dilutions reported in cosmetic formulations of European origin, penetrates skin whether in a lacquer, ointment or alcoholic solution. . . . Reports *written et al.*

. . . . W. B. Rankin of the F. D. A., speaking before Oak Ridge Institute of Nuclear Studies, says anew, that radioactive chemicals (and isotopes now) have no place in cosmetics. . . . Well, as of May 13, Commissioner Crawford of the F. D. A. has stopped the use of polyoxyethylene monostearates in foods . . . he says there is a substantial question of their safety. . . . Wonder what happened to the hiatus created by Dr. Hueper's testimony at the Delaney Committee hearings about a year ago, when he pointed a threatening finger at a couple of F. D. & C. colors (F. D. & C. Green #2 and F. D. & C. yellow #3 & 4), certified by F.D.A. as being cancerogenic when injected into animals? . . . Kudos to Fred Wells of our well known British contemporary (*Soap, Perfumery & Cosmetics*) on the story of the Society of Cosmetic Chemists in a recent issue of *Industrie de*



## It pays to go by the book!

Naturally, this book is a "closed" one. Names of the brands of fine cosmetics and toiletries made by the Private Brand Division of Avon Products are held in strict confidence.

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# *Avon Products* INC.

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la Parfumerie. . . . The battle of hexachlorophene and D. C. M. X. in antiseptic soaps went on between Gump-Cade and Gemell-Acheson in the April *Manufacturing Chemist*. . . . *Usnic* acid found in oak moss oleoresin is being studied as an antibiotic . . . so are related compounds. . . . Alcohol in concentrations of 40% increases suspending power of gum tragacanth according to *Husa and Plaxco*. . . . Starch reacted to form diether linkages from its hydroxyl groups to the extent of 1.7 to 4.5% is a free flowing substance suitable as a dusting powder according to U. S. Patent 2,626,257. . . . An article in the Practical Edition, J. A. Ph. A., for March made a strong case for propylene glycol against alcohol pricewise in finished pharmaceuticals . . . In some cases the difference is 10 fold . . . the same would hold true probably for glycerin replacement with propylene glycol. . . . Don't overlook the usefulness of *Montan Wax* as a high melting point solidifier. . . . *Bean* finds that fingernails grow at an average rate of 0.119 mm. daily. . . . *Canadian Toilet Goods Manufacturers Association* celebrated its 25th anniversary during its con-

vention in Quebec City, starting June 25th. . . . Alkyl thiosulphates such as ammonium lauryl thiosulphate can be used as fixing agents in cold waving of hair (U. S. Pat. 2,615,782). . . . Is it good business to add a \$5.00 mixing charge for orders of perfume compounds under \$25.00? . . . that is a 20% increase. . . . One understands the compounders' position but if one company is doing it alone, maybe they won't have to compound very long. . . . Hair dyes of the class of aminoanthroquinones (British Pat. 687,227) are nonoxidizing in type and can be applied to hair at temperatures of from 40°-55°C., the higher the temperature the deeper the tint. . . . A hand lotion with chlorophyll has just been introduced in England. . . . *Harlan*, writing in a recent issue of the *International Perfumer*, classifies soap fragrances into five groups . . . women and men appreciate the fragrance respectively in each of two groups . . . each tolerates the others fragrance in the other two groups and finally, the odors of one group are appreciated by both sexes . . . these are rose, lavender and rose-nerol notes.

not. Will the product be stable? Would the produce be impaired by adding enough of an emulsifier (with or without lanolin) in order to give it a milky appearance?

Y.I.T., Penna.

*A. Sodium bromate is preferred for a liquid neutralizer. It is more soluble than the potassium salt. The concentration you suggest seems adequate and the product should be stable. Any emulsifier added must be neutral and not reactive with the oxidizing agent.*

#### 1026: Cream Claims

*Q. For about fifteen years I have been making a cream, sample of which I am mailing to you. The question is, am I safe in using this formula? The claims I would like to make are these: A cleansing cream, a penetrating night cream, a thin film left makes an excellent powder base. (Formula given).*

F.H.D., Minnesota

*A. While your cream is soft, we see no objection to it whatsoever. It appears to be fairly smooth and if it is heated stable you should have no problem with it. Our test shows some heat stability but you should make more complete tests. The claims you expect to make for this cream appear to be in line, although we would leave off the word "penetrating."*

#### 1027: Drying of Creams

*Q. We have been using the formula from deNavarre's book for a vanishing cream deodorant. This is a good formula, but we notice that creams marketed since the book was published claim they will not dry out when the top is left off the cream jar. I would like to know how this is effected and would like to know also if it would be feasible to stabilize glyceryl monostearate with diethyleylamid phosphate and whether this would require professional skill and equipment.*

T.S.P., Conn.

*A. All highly hydrated vanishing creams will dry out. They simply have to. The difference is that some dry a lot more quickly than others. It is doubtful that you could obtain the particular phosphate mentioned in your letter, but if you can, you might try using it with soap-free glyceryl monostearate, in place of whatever emulsifier you are now using. Simply be sure you use enough humectant, such as one of the polyols, to slow down evaporation.*

## Questions and Answers

#### 1023: Spray Deodorant

*Q. We want to know how to make an underarm deodorant of the spray type, in a squeeze bottle. The name, of course, is familiar but I do not know the nature of the product.*

C.B.L., New York

*A. You should experiment with solutions of about 15%, more or less, of aluminum chlorhydroxide complex in water which contains 10 or 15% alcohol, and about 5% propylene glycol with some solubilized fragrance.*

#### 1024: Ointment Manufacture

*Q. We should greatly appreciate it if you could recommend a good text on ointment manufacture. We are particularly interested in manufacturing methods, equipment which can be used both on a large and small scale, and control methods. We enclosed a stamped envelope for your convenience in*

replying, and extend our thanks in advance.

V. I. K., New York

*A. We do not know of any texts which cover ointments only. There are many pharmaceutical texts which discuss ointments in various ways so we would suggest that you see these at the New York Public Library or at one of the pharmacy college libraries connected with your several New York universities.*

#### 1025: Cold Wave Neutralizer

*Q. To neutralize cold wave solutions, we are using at the present potassium bromate granular. We would like to change to a liquid concentrated non-peroxide neutralizer (4 oz. of a concentration to a quart of water).*

*Do you think that 0.5 oz. of sodium bromate in 4 oz. of water will be effective? We found that sodium bromate is soluble in that proportion, while potassium bromate is*

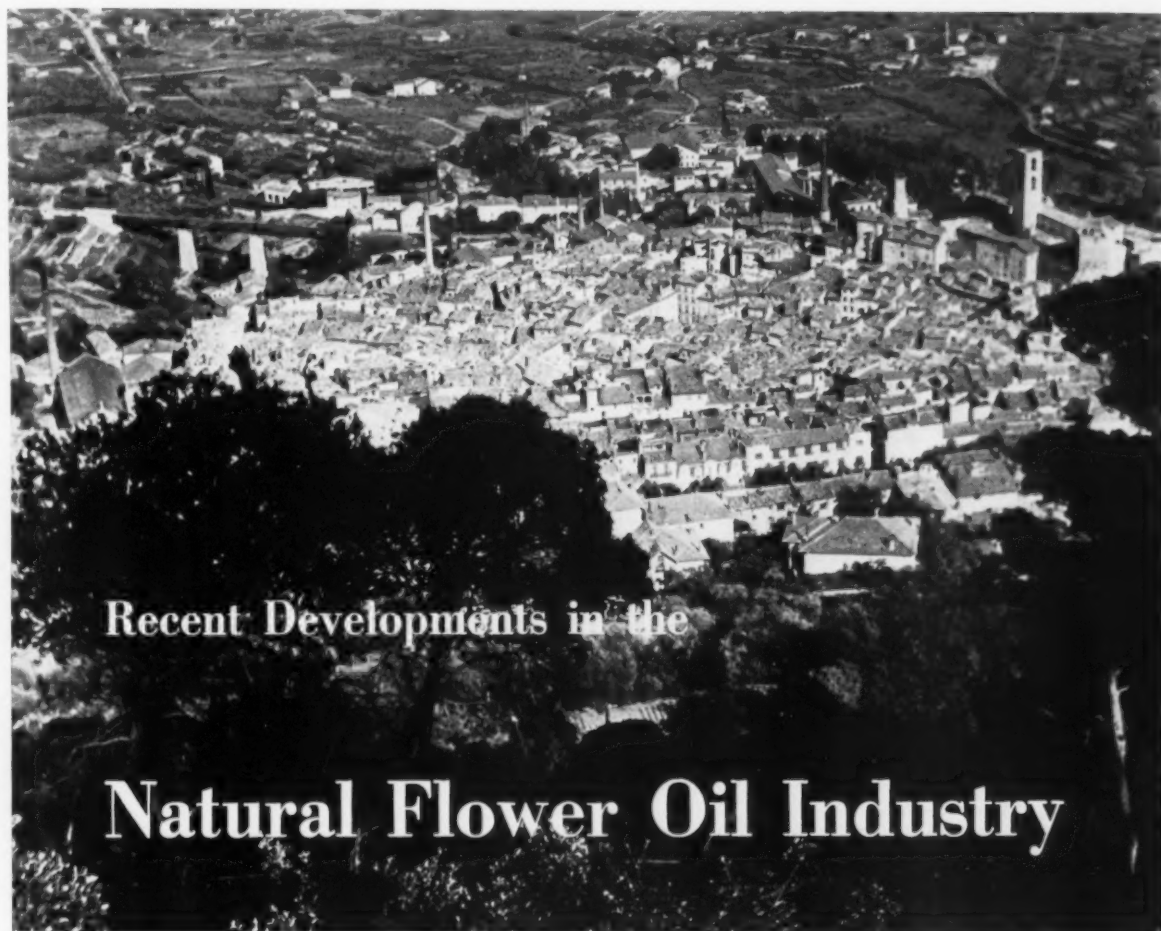


*rosentière, all  
elements of the  
fragrance of  
rose absolue*

*perfume is a paranymp to beauty*

*"naarden"*  
HOLLAND





## Recent Developments in the Natural Flower Oil Industry

*Panoramic view of Grasse and its surroundings.*

BY ERNEST GUENTHER, Ph.D.\*

THE American user of floral oils should be interested to hear about the present situation in Grasse, Sicily, and Northern Africa with regard to these products, and something about the outlook for the future. The writer, who has been familiar with the situation in Grasse for many years, and who recently completed a survey of activities in the Western Mediterranean, will attempt an objective account of these latest movements in the industry of the natural flower oils.

### *New Areas of Production*

The most striking development, perhaps, is the emergence of new areas of production away from the Grasse region. While Southern France continues to produce substantial quantities of highest quality floral

oils, new areas of exploitation bordering the Mediterranean have recently been opened. These areas offer ecological conditions suitable for the production of oils at a cost considerably below that possible in Southern France.

Such an eventuality was anticipated as early as the beginning of this century by some of the French producers themselves. In 1904 Charles Garnier established a plant for the extraction of roses in Bulgaria, and in 1912 a similar plant for the treatment of jasmine and cassie flowers in Egypt. Since then more and more areas of cultivation and processing have been opened, and today the Grasse industry no longer holds the monopoly in the production of natural flower oils which it once enjoyed. Southern France must now compete increasingly with Sicily, Morocco, Algeria, and Egypt. But if Grasse has lost some of its importance as a producer, it has gained a good deal as a center of distribution. This

\* Vice-president and technical director, Fritzsche Brothers, Inc., New York.



Freshly gathered roses are spread out on the factory floor, prior to extraction with volatile solvents (Seillans, Var), France.

change has resulted from a number of factors, some perhaps avoidable, others inevitable, but not entirely understood by outsiders, particularly Americans.

### The Flower Oil Industry Of Southern France

LIKE few other places in the world, the Grasse region is endowed with a number of factors favorable to the cultivation and industrial treatment of flowers: a fertile soil, generally mild climate, plenty of sunshine,

southern exposure, protection against cold winds by the Maritime Alps, and last but not least, an intelligent and industrious population.

The Grasse region is situated at about the northern limit of the area in which industrial floral crops can be raised successfully. In general, and within certain extremes of temperature, flowers from cooler regions exhibit a more delicate perfume than those from warmer areas, which are notable for their heavier fragrance. Jasmine, rose, tuberose, and the bitter orange were originally introduced into the Grasse region from more southerly countries, hence must be cultivated with the greatest of care for survival against even the mild winter cold in Southern France; but this intense cultivation contributes much to the delicacy of the floral oils derived from these plants. The best floral material produced in Grasse comes from grafted, therefore selected, plants. (Similar factors of climate and cultivation appear to hold for the grape: those grown in cooler sections, and by grafting, produce wines of superior flavor.) Moreover, there are considerable variations in humidity around Grasse, a fact which also appears to favor the development of high-grade floral oils in the plant. A constantly high humidity—as in more equatorial areas—is apparently one of the factors responsible for the heavier notes so typical of tropical flowers.

The picturesque and charming flower oil industry of Grasse reached its peak shortly before and right after World War I, when large quantities of a great variety of flowers were grown and processed: jasmine, rose, bitter orange blossom, cassie, mimosa, tuberose, jonquil, reseda and violet. These flowers formed the raw material for a score of factories which had been erected in Grasse and its vicinity—from Seillans in the east to Golfe Juan in the west, a distance of about 30 miles.

However, within the last 20 years the Grasse industry has encountered increasing competition, brought about chiefly by three factors:

1. Aromatic isolates and synthetics have taken a heavy toll of natural products; even in high-grade perfume formulas the percentage of natural flower oils has been reduced, and new and much lower priced synthetic specialties have been substituted, many of them giving quite satisfactory results. With the progress of organic chemistry this sort of substitution will undoubtedly continue. It should be remembered that a creative per-



Gathering of rose flowers in the Grasse region of southern France.



Harvest of lavandin in the south of France near Valensole (Basses-Alpes). The flowering plants are cut by hand with sickles.

fumer is limited in the cost of his composition, for the simple reason that in our present highly competitive industry the successful marketing of a perfume necessitates much heavier expenses for advertising than formerly. And only too often the marketing costs have to be compensated for, at least in part, by economizing on the basic perfume composition. The perfumer is therefore always on the lookout for new synthetic specialties, by the skillful use of which he hopes to reduce the high cost of his natural oils.

Unfortunately—and this perhaps was their gravest mistake—most manufacturers in Grasse initially misjudged the importance the synthetics would some day attain, and refused to associate themselves with the synthetic industry when it made its beginning between 1885 and 1900. Germany, Switzerland, Holland, and Northern France developed into headquarters for the young industry, and Grasse continued its activities almost exclusively in the field of natural oils. Today it is too late to regain the lost ground, the production of synthetics requiring highly specialized and costly equipment, and a great deal of experience on the part of chemists, engineers, and operators. The installation of new equipment alone would make it prohibitive to compete with a well-established industry with 50 years of experience behind it.

2. Formerly, manufacturers in Grasse encountered no difficulty in obtaining the flower material they required. This was supplied chiefly by a large number of independent growers. (Even now there are more than 2,000 jasmine growers in the area.) Thirty or more years ago these peasant cultivators led a rather precarious existence, having practically no choice except to sell the products of their land to the processors in Grasse—this often at prices that left only a modest profit to the growers. Even in those early days strong efforts should have been made to support the agricultural part of the Grasse industry by a far-reaching research program, aiming at better returns per acre by the introduction of new and higher-yielding plant varieties, by more efficient methods of field management, etc. Unfortunately, few manufacturers in Grasse realized that their industry comprised two vital branches—one technical, the other agricultural. The latter was pretty much taken for granted, and today the methods employed and the kinds of crops raised remain substantially as they were

years ago. No wonder then that the capacity of the extraction plants in Grasse has outgrown the actual supply of flowers, and that in 1952 many manufacturers found themselves short of certain flower material.

3. While these developments could perhaps have been averted by planning in time, there is another and even more cogent factor involved in the change we are discussing, a factor beyond the control of the Grassois. This is the transformation of the French Mediterranean littoral (of which the Cannes-Grasse section forms a part) from a purely rustic, rather picturesque

Gathering of bitter orange (neroli bigarade) blossoms in the Grasse region of southern France.





A modern lavandin distillery in St. Jurs (Basses-Alpes), southern France.

region, into one of the world's gayest playgrounds. The lovely countryside around Cannes would appear at last to be paying the price for its incredible beauty. In our days of rapid transportation and heavy tourism such a countryside cannot long remain entirely agricultural; it will inevitably be invaded by the vacationer.

Until about 30 years ago the sunny French Riviera was exclusively a *winter* resort attracting Europe's and America's aristocracy and wealth, but empty of visitors in the summer. During the long months of warm weather practically all hotels closed down and the agricultural hinterland went about its usual activities, among them the growing of flowers for the perfume industry in Grasse. Shortly after World War I some tourists from England discovered that the Riviera was pleasant, and cheap to visit, in summer. Gradually the fame of the fabulous Côte d'Azur as a summer resort spread over Europe and America. At the same time there took place a profound change in our way of living. Sports and sun bathing became fashionable, and now the Riviera is overcrowded during the summer months with sun worshippers of all nationalities, filling large and small hotels to capacity.

The automobile, too, has played a profound part in these developments. A large number of tourists from all over Western Europe now find it convenient and comparatively inexpensive to make a quick trip to the Riviera and camp near the lovely beaches of the blue Mediterranean. Many tourist camps and restaurants have sprung up along the seashore and in places that had retained their natural beauty until quite recently. The Riviera is getting crowded, like certain parts of California and Florida. Moreover, there has been a steady increase in the permanent population of this section of Southern France; again it is the sun and the generally easy way of living that have induced thousands of people from the north to spend their years of retirement in the south. Land has increased quite substantially in value, most of the great old estates have been subdivided, and many an agricultural field has been converted into a site for the building of new

homes. Under these circumstances it hardly pays to grow flowers for the Grasse perfume industry; farmers can now make more money by raising primary vegetables, fruit, or cut flowers for the tourist trade and for export. (The development of air transport has had a profound and beneficial influence upon the *cut flower* industry of the French Mediterranean littoral. Large quantities of flowers are now shipped by air from the large airport near Nice to Northern Europe; and this with much less risk than before the last war, when they had to be transported by rail, often at considerable loss. As a result, the production of cut flowers has become a profitable venture, by now far outranking the production of industrial flowers.) Growers in the Grasse region are further handicapped by the fact that labor is drawn to the hotels and restaurants along the seashore, which can afford to pay much higher wages than the flower growers can. And working in the seaside resorts certainly is more pleasant than picking flowers in the fields from early dawn until the hot noontime—an activity requiring stooping for hours and hours, working steadily and rapidly to pick a quantity of flowers sufficient to earn a bare living. Formerly this work was done largely with the help of hired women and children; today very few of them are interested. In consequence, the growers and their families have to do much of the work themselves, which explains why the present rose plantings, for instance, are small—patches so to speak.

#### **Problem of Labor**

The problem of available labor has become very important in recent years, particularly to the few remaining large-scale cultivators of jasmine, the harvest of which lasts from the end of July until October. Seasonal labor must now be imported from Italy—men, women, and children to whom the collection of jasmine flowers affords a welcome means of livelihood. Working as a team, a family with children can gather substantial quantities of blossoms. Last year (summer of 1952) 165 French francs were paid for every kilogram of jasmine flowers. Starting at sunrise and working until 2 or 3

P.M. a woman can harvest from 4-7 kilograms of blossoms, the amount depending upon her skill and the weather. (One kilogram of jasmine contains from 8,000 to 10,000 blossoms.) After a rainy night the flowers are heavy with moisture, after a windy day they may weigh only half the normal; moreover, during a strong wind it is much more difficult to pick the flowers. A family team may gather as much as 20 kilograms in a day; in 1952 this meant 3,300 francs (about 8 U. S. dollars)—a high daily income for unskilled labor in Southern Europe.

While the harvest represents the heaviest expense in the overall cost of the flowers, there are other items to be included: cost of planting and grafting (it takes three years for a jasmine field to reach full production), cost of cultivating and weeding, hilling up in winter, etc. Altogether the growing of jasmine in Southern France has become a costly venture, which accounts for the substantial rise in the price of concrete and absolute. Moreover, the industrial risks are increased by ever-growing competition from Southern Italy and North Africa. These observations apply not only to jasmine, but also to rose and orange blossom.

In the face of all these difficulties the Grassois are still holding on for reasons of tradition and sentiment. An industry that prospered for generations is not readily abandoned. Their "know-how" has always enabled the farmers in the region to produce high-grade industrial flowers, permitting the manufacturers to supply floral oils of unmatched quality. For example, certain bitter orange groves are very old, having been passed down from father to son. French farmers are known for a love of their native soil, and who would have the heart to cut down these venerable trees in order to grow vegetables? But occasionally a farm is sold to make room for real estate development, and then the orange grove will disappear. This has happened also, and particularly, to the acacia trees which once embellished the beautiful environs of Cannes.

In spite of the serious situation just discussed, Grasse has by no means reached the end of its distinguished career. There is too much tradition, experience and art in this old industry; it will undoubtedly survive, but in a somewhat different form. For generations Grasse has

produced some of the world's best perfumers, artists who have supplied leading houses in Paris and all over the world with compositions forming the basis of the most famous perfume creations. There have always been strong personal relations between the manufacturers in this area and the perfume houses in Paris and London, and other cities abroad. The best natural flower oils still come from Grasse; the Grassois know what raw materials the perfume industry requires. To alleviate their present difficulty some firms have been trying to develop other products, among them fruit juices and flavor bases for soft drinks which since the last war (and perhaps under American influence) have become quite popular. But Grasse will always remain essentially a center of perfumers' materials. The creation of subtle fragrances is an art requiring quietude, a beautiful environment, inspiration and tradition—all of which the lovely country around Grasse offers in abundance.

#### Present Crop Situation

Let us now briefly discuss the present situation with regard to the principal *individual* crops of aromatic plants in the Grasse region:

1. *Jasmine*. Annual production of concrete now varies between 1,800 and 2,000 kilograms. In 1952 the quantity of flowers harvested amounted to almost 700,000 kilograms. For the reasons explained above, prices are high and will probably go even higher in the future. They will certainly always be substantially above the prices of the Sicilian and North African products. On the other hand, the quality of the jasmine from Southern France is still superior to any other, for these reasons: soil and climatic conditions, and long experience in the cultivation of flowers and extraction of oil. Discriminating buyers, particularly in Paris and London, still prefer the French product, and are willing to pay a premium for it. But if the quality of the Sicilian or North African concrete should ever equal that of the French, the Grasse jasmine industry may find it difficult to survive.

2. *Rose*. Because of rainy weather and damage caused by a parasite, production of rose flowers in 1952 amounted to only about 400,000 kilograms, considerably below the world's requirements, particularly in



A distillery of lavender and lavandin with Eysseric stills in the Basses-Alpes, southern France.



Gathering of jasmine blossoms in the Grasse region of southern France.

view of the fact that the important Bulgarian concrete at the present time is difficult to obtain. However, encouraged by a substantial rise in the price of rose flowers, growers in the Grasse region last year increased their rose plantings, and from 600,000 to 700,000 kilograms of flowers were produced in 1953.

3. *Bitter Orange Flower Oil, from Neroli Bigarade.* In 1952 flower production amounted to almost 1,100,000 kilograms, which meant about 1,000 kilograms of (distilled) neroli bigarade oil, plus a much smaller quantity of (extracted) concrete of orange flowers. The quality of the French product is superior to that of the oils from Southern Italy and Northern Africa, hence commands a higher price. The difficulty in disposing of the orange flower *water*, encountered by the distillers since the last war, is another reason for the present high prices of the French neroli bigarade oil. In general, production in Southern France is not likely to decline within the next few years because growers hesitate to discontinue their old groves.

In this connection we should mention also oil of petitgrain bigarade, distilled from the leaves of the bitter orange tree. Years ago the Grasse-Golfe Juan region produced substantial quantities of highest quality. Recently it has been replaced in part by the much lower priced oil from Haiti (West Indies).

4. *Acacia and Mimosa.* Most of the acacia trees (*Acacia farnesiana*) have disappeared from the vicinity of Cannes, the former gardens having made room for real estate encroachment. Moreover, the collection of blossoms from the thorny branches is a painful task which few people are willing to undertake today. Acacia is now being grown in Syria, Palestine, Egypt, and Morocco.

As regards mimosa, an ample supply of flowers is still available in Southern France during the blooming months in early spring. Harvest of the flowers here has undergone great fluctuations from year to year, ranging from about 400,000 kilograms in 1951 to 50,000 kilograms in 1952. The figure can be increased again in the

coming years, depending upon the demand for the concrete and absolute. It seems a pity that this floral oil, so valuable in the fixation of perfumes, yet so reasonably priced, has not found a much wider recognition in the perfume and cosmetic industries. Large quantities could be produced every year in a season when the manufacturers in Grasse are not busy with other products.

5. *Tuberose.* The growing of tuberose flowers represents a very costly task; hence production of concrete in the Grasse-Pégomas region has declined to very low figures. Some concrete is now being produced in Algeria, and small—but increasing—amounts in Morocco.

6. *Violet Leaves.* Here, too, yearly harvest of the leaves has varied between 50,000 and 400,000 kilograms, depending upon the world's demand for concrete and absolute of violet leaves.

7. *Orris and Oakmoss.* Substantial amounts of concretes of orris root and oakmoss (*mousse de chêne*) are still being produced in the factories of Grasse and vicinity, although most of the plant material has to be imported from Italy (Tuscany) and Yugoslavia.

8. *Labdanum.* Large quantities of concrete, absolute, resinoid and distilled oil are being produced in the Grasse factories from plant material growing wild in the nearby Esterel Mountains, or imported from Corsica, and particularly from Spain.

9. *Oil and Concrete of Geranium.* Once Southern France, particularly the Pégomas region, produced substantial quantities of geranium (*Pelargonium*), which yield an oil of superb quality. However, most *Pelargonium* species are subject to winter killing, and since occasional frosts occur in the south of France, *Pelargonium* must be grown there as an annual—a very costly procedure. *Pelargonium* plantings have consequently been reduced drastically, the largest remaining field being located near the airport of Cannes. On the other hand, large plantations of *Pelargonium*, yielding a very fine grade of French type geranium oil, have been started near Tiflet in Morocco and are already in production (see below).

10. *Oils of Lavender and Lavandin.* Southern France produces now about 50,000 kilograms of lavender oil, and almost 300,000 kilograms of lavandin oil per year. Regions of production are located in the Départements of Basses-Alpes, Drôme, and Vaucluse—more than 100 miles from Grasse. The oils are distilled by numerous farmer-producers, in stills distributed throughout this mountainous section. Part of the oils produced go to Grasse for distribution; a substantial percentage reaches overseas markets via Marseilles or other ports. A small portion of the harvested flowering plants is trucked to the extraction plants in Grasse and its vicinity for conversion into concretes.

11. *Patchouly.* Prior to the First World War most of the patchouly leaves grown in the Far East were shipped to Europe in dried and baled form for processing in the modern distilleries located in Grasse, Leipzig and London. The shortage of shipping space arising during the First World War brought about a fundamental change in the patchouly industry, and now most of the plant material is distilled in native distilleries located near the fields, in northwestern Sumatra and British Malaya. Today only small quantities of dried

patchouly leaves are exported to Grasse for distillation. The efficient equipment used here makes for an oil of excellent quality, superior to that of the Asiatic oil obtained in rather primitive stills. However, the long overseas transport of the dried leaf material from Malaya to Marseilles increases the cost of the Grasse-distilled oil so much that it can be employed only in high-grade perfumes where price does not play too great a role.

12. *Other Essential Oils, and Resinoids.* A number of additional essential oils are produced in Grasse from plant material grown either in Southern France or imported from other countries: celery, parsley, carrot, clary sage, angelica, valerian and chamomile among them. Included also should be the so-called resinoids extracted by means of various solvents from imported gums and balsams, for example, benzoin, olibanum, myrrh, opopanax, styrax, balsams Peru and Tolu. These are important perfumers' raw materials, indispensable for the fixation of perfumes.

While the quantities of these various essential oils and resinoids may not be large, their total may amount to a substantial figure in the overall operation of a single factory.

From what we have just said, it is evident that a well managed firm in Grasse can still produce a considerable variety of perfumers' raw materials. And this very diversity of products is one of the most important factors favoring the survival of the Grasse industry.

*(To be continued in succeeding issue)*

## People Who Sell

PEOPLE who sell are more than distributors of goods. They are the eyes and ears of the company. They are the ones who come in direct contact with the distributor or the customer. They know what the customer thinks of the product, what he expects of it, and how it stacks up against that of the competitor. They are usually the first to detect the direction of public demand and the manner in which the competitor is reacting to it. The counsel of the sales executive is highly desirable in planning a research program—*Battelle Memorial Institute*.

## Of Floats and Fragrance

A SWEET smell arose from the 50 floats in Portland's famous June Rose Festival that did not come from the flowers.

Fire fighting equipment in hand, George Eaton of Duvelle's, Portland perfume makers and only exclusive perfume manufacturer with national distributorship on the west coast, bathed each float with a concentrate of his "Portland Rose" perfume.

The equivalent of a half ton of petals was sprayed on each float. A gallon to a gallon and a half of concentrate, thinned down with water, was used on each float and at the going price of \$3.00 per dram each float was drenched with what could be thought of as \$1300 worth of scent.

Eaton admits that the chief advantage of his float spraying is as a public relations stunt. His firm also sprayed floats in the May parade at Santa Rosa, Cali-

fornia, honoring Luther Burbank, the plant wizard. The blend used then was "City of Roses."

The Duvelle organization has been in the business since 1925, starting out with a general cosmetics line. In 1929, when the death knell was sounded for many businesses, the Eatons switched to perfume only and really got going. They opened their lines in the Dust Bowl states in 1932 and 1933 when the drought was starving out the people, yet found a ready market, according to George Eaton.

The company now has an intensive coverage of the area west of the Mississippi where the product is handled chiefly through large department and drug stores. Distributorship in the east is spotted; the firm plans a blanket coverage of the eastern states within several years.

George Eaton, himself a chemist and supervisor of production at his plant, has six sons in his business. Charles, who has just completed a seven-year course at Choinards Art School in Los Angeles, will be in charge of design and advertising. Glenn A. Eaton has charge of sales, and Mrs. George Eaton supervises all packaging.

The plant at Parkrose in East Portland utilizes some 1800 square feet of floor space. Most popular scent developed by the Eatons is "Le Gui," which is French for mistletoe. The two latest scent developments are "My Folly" and "Babylon," a woody aroma with a hint of the Orient.

The Eatons buy their perfume oils ready blended in France. By the time the oils reach Portland they have been aged three months. At Duvelle's it is re-blended and stored. Following aging of an additional three months, the oils are made up into perfume, colognes and toilet waters. After this final mixing, the product is funnelled into  $\frac{5}{8}$  of a gallon colored containers and allowed to set six months at a constant temperature of 50 degrees. Then the product is filtered, siphoned into a variety of bottle sizes, and packaged. Fixatives used at Duvelle's are musk, ambergris and civet, and each perfume is mixed with a blend of the three—*Naomi Miller Disney*.



Fire fighting equipment in hand, George Eaton of Duvelle's, Portland perfume makers, bathes flower-laden float with "Portland Rose" perfume.

## The Odour Trails of Ants

R. W. MONCRIEFF

THE celebrated naturalist, Bethe,<sup>1</sup> first investigated the scent trails of the ant *Acanthomyops niger*; these trails are made to indicate the best path between two points of interest, one of which is usually the nest of the ants and the other is often a source of food or may be a pile of larvae suitably placed for experimental purposes by the observer. At first, the ants experience some difficulty in finding their way between the two points, but once they have ascertained it, they lay a trail with some odorous deposit from their bodies; thereafter they, and their fellows, follow the trail with considerable ease. There is no doubt that they are following an odorous trail because if a finger is drawn across the trail the ants are soon in difficulties. Carthy<sup>2</sup> at Cambridge University has recently demonstrated that the scent trail can be photographed. He employed a different species of ant from Bethe; whereas the original worker had used *Acanthomyops niger*, Carthy preferred *A. Fuliginosus* which he found to be a more reliable layer of trails than *A. niger* which apparently only laid trails when excited, whereas *A. fuliginosus* laid them habitually.

Carthy's experiment was designed in the following way: He placed a pile of larvae in the centre of a circular glass arena, 1 ft. across; workers were introduced to the larvae and started to carry them to their nest; the glass over which they were running was dusted with lycopodium powder which, it was found, adhered to the scent trail and threw it into relief so that it could be photographed. It can then be seen that the trail is discontinuous, it is split up into dashes which are usually about 4 mm. long, shaped so that they have the appearance of a drop of fluid extruded and drawn out in the direction of running. The form of the track varies with the individual and sometimes the dashes may be much longer than usual.

The ability to lay—or not to lay—the trail is under

the control of the ant; in the first journeys, whilst the ant is still learning its way, odd pieces of trail are laid, and as the worker gains familiarity with the path, these are joined up and overlaid. After about ten journeys there is a tangle of trails over the most favoured route. Two points of interest emerge from Carthy's observations.

1. That trails are laid irrespective of the purpose of the journey, for it had previously been thought by Brun<sup>3</sup> that scent trail laying only took place when the workers were carrying food; this evidently is not the case.

2. The trails are probably not orientated, i.e. an ant cannot if it strikes the trail midway know, without trial, which way is towards the nest; some ants which encountered the trail in the middle went westwards, others towards the larvae. Several workers have hitherto supposed the trail to be orientated but apparently mistakenly. The fact that trail laying is carried out by ants moving in both directions, to and away from the nest, militates considerably against the likelihood that it could be oriented.

### References

<sup>1</sup> A. Bethe *Pflügers Archiv.*, 1898, 70, 15

<sup>2</sup> J. D. Carthy *Nature*, 1950, 166, 154

<sup>3</sup> R. Brun "Die Raumorientierung der Ameisen," Jena, 1914

## Packaging and Labeling

ONE of the sectors of the public relations front that is neglected to a surprising extent, even in companies considered quite public relations-minded, is packaging and labeling. Anyone who is skeptical of the opportunities for improvement here need only read over the text on 25 packages of popular household commodities of different manufacturers, picked up at random. That test will spotlight the wide differences in the "I-want-to-help-you" impression they give—reflecting corresponding differences in the amount of public relations thinking that was done in creating them.—W. G. Werner, Procter & Gamble Co.

## Cosmetic Excise Tax Collections

COSMETIC excise tax collections for the years of 1951 and 1952 and also the collections for the months of 1953 so far issued are given in the table following:

	1953	1952	1951
January	\$13,123,480	\$11,547,853	\$12,255,363
February	13,859,961	14,338,420	12,867,842
March	7,805,077	7,248,879	8,534,569
April	9,236,101	8,218,865	5,746,348
May	9,286,470	9,174,622	9,293,461
June		8,253,649	8,622,275
July		9,357,443	8,901,311
August		8,849,488	10,252,706
September		8,523,241	7,698,854
October		8,439,370	9,365,932
November		7,878,976	8,916,488
December		10,432,117	8,974,245



"It would take too long for green lipstick to catch on and I am not sure that I like it . . ."

# French Art and Science of Fixation

*Importance of alcohol soluble fixatives from flower essences.*

*Modern synthetic fixatives . . . Formulary of fixation\**

MODERN formularies have—according to the French—insufficiently underlined the fixative powers which are naturally available in flower essences as extracted with volatile solvents. Only recently have the Laboratoires Gattefossé produced a table of the yields in fixatives, which should convince the trade of this important angle. This table indicates the concrete yields of the most popular flowers upon solvent extraction; further, the yields of absolute drawn from the concretes (i. e. the yields that are completely soluble in alcohol), the percentage of volatile perfume components drawn from the concretes by water vapor distillation and, finally, the yields of alcohol-soluble fixatives from the same source.

The last column as such will strongly impress the reader with the importance of the non-volatile fractions found in the natural perfume products. In the highly scented flowers, such as jasmins, rose and orange, the percentage of odorous elements exceeds the rate of fixatives found, or, it stays in its vicinity. Thus, the rate of perfume-to-fixative extraction is 25/35 for Rose, 15/35 for Jasmin, 25/25 for Orange. But in the lesser-known absolutes the relation is equivalent to the one found in authentic fixative products; thus, in Ciste-Labranum it amounts to 15 parts by weight of volatile, and 35 of fixative components (paralleling Jasmin), and in Oakmoss even to the ratio of 5/45, which indicates its fixative value.

## *Natural Floral Fixatives*

We can easily draw the conclusion that in an extract exclusively composed of flower absolutes (without the addition of synthetics which are volatile in their entity), about one third in volatile perfumes, and two thirds of fixatives are present. No other proof is needed to show that a natural extract has a better lasting power than any conceivable synthetic compound. Further, the "built-in" natural fixative which lasts even after complete evaporation of the volatile components has exactly and accurately the true odor of the flower.

Principally speaking, an equivalent fixation has



An old Grasse street (La Rue Tracastel).

never been obtained, or, even, attempted in perfumes that include synthetics. Even by adding the unusual rate of 10% in fixatives in 100% of synthetic substances we would achieve a rate of 90/10,\* while the rate provided in nature averages 33/66. This fact will amply explain why "modern perfumes don't last . . ."

We might even push the relation farther and take into account that in the past, an extract for the handkerchief included essential oils with their 2/3 rate of natural fixatives included and—moreover—absolutes as such.

In checking on the analyses of essential oils as published in modern formularies (particularly the late work of Gattefossé) we will note that commercial oils include all the "tail" products which can be removed by a secondary distillation, while the same "tails" are missing in synthetics and terpeneless essences—to the

\* Third and concluding article. Condensed from the French by Margaret Neurath. Originally published in *La Parfumerie Moderne* Vol. 40 No. 14.

\* ) or, 90:10, etc.

detriment of their lasting power. Whatever has been achieved in purity and solubility in diluted alcohol, has been lost in fixative qualities.

In a perfume holding equal rates of flower absolutes and essential oils, the rate of fixation moves from its natural 33/66 toward 64/38, which means that the compound will include 38% in fixatives. By mixing two parts of oils with one part of absolutes we still get a coefficient of 76/24,—i. e. 24% in fixatives.

The efforts of the modern perfumers at Grasse are, therefore, aimed at an increase in the rate of fixation and the addition to their formulas of those absolutes and fixative substances, which the public claims. In effect, the startling success of some amber-scented, warm, exotic perfumes is to a lesser extent due to their originality, than to the surprising fact that they will, definitely, last for a certain period of time.

#### Modern Synthetic Fixatives

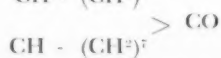
The first products of synthesis found and used in perfumery practice were the ketones and lactones; par-

FLOWER YIELDS IN ABSOLUTES, VOLATILE COMPONENTS, AND FIXATIVES

Name of Flower	% of Concrete Yields	% of Absolutes extracted from concrete	% of Volatile Components extracted from concrete	% of Fixatives extracted from concrete
Broom	0.15	30	5	25
Cassia	0.50	33	9	25
Carnation	0.25	10	2	8
Ciste	3 to 5	50	15	35
Clove	0.12	40	0.5	35
Honeysuckle	3.30	23	5	18
Hyacinth	0.20	12	2	10
Jasmin	0.30	50	15	35
Jonquil	0.30	50	4	46
Lavender	2	50	37	13
Lilac	0.30	38	13	25
Mimosa	1	25	5	20
Narcissus	0.25	30	3	27
Oakmoss	3	50	5	45
Orange	0.25	50	25	25
Reseda	0.20	30	4	26
Rose	0.20	60	25	35
Sauge Sclaree	1	80	10	70
Tuberose	0.10	20	4	16
Verbena	0.25	50	30	20
Violet flowers	0.10	35	3	32
Violet leaves	0.10	35	10	25
Ylang-Ylang	1	70	50	20

ticularly the macrocyclic compounds. These are remarkable in fixing power; however, in higher concentrations they anesthetize the olfactory cells. This is why they must be employed in traces only.—A synthetic musk of this type with a pronounced animal note is "Thibetolide," while, for a more flowery note, "Ambrettolide" is indicated.

Ruzika, in 1926, had shown that natural musk is a cyclic unsaturated ketone of 17 carbon atoms, according to the formula



Later he found that cyclic ketones of 8 to 24 chains

could be produced. The odors vary progressively, depending on the rate of carbon condensation. Cyclic ketones of 10-12 atoms have a camphor odor. Cyclo-tridecanone holds a fragrance of cedarwood; cyclo-tetradecanone already shows a musk note, which appears alone in cyclo-pentadecanone. Cyclo-heptadecanone holds the perfume note of Civettone. The higher cyclic odors hold a decreasing musk note and are of no interest in this instance.—Ruzika found also that natural Muscone is a cyclic ketone, namely, methyl-cyclo-pentadecanone.

The Société des Usines Chimiques Rhône-Poulenc has originated "Musk B. R. B." which holds the note of Tonkin musk and has a high lasting power. A tincture of 3% in alcohol is now being used in France, instead of the old recipe of 3% Tonkin musk. An addition of 0.50% improves the rounded bouquet and lasting power of flower perfumes; however, the product needs a month of aging to show its efficacy. The B. R. B. is absolutely non-toxic and has a pleasant flavor which makes it more suitable than natural for use in powders, creams and lipstick. It will often soften the odor if added to it at a rate of 1:10,000.

Exaltone is a cyclic ketone, or, cyclic pentadecanone; holds the purest musk note among the synthetics and produces fine effects, particularly in soaps. Exaltolide is the corresponding lactone and made under patents by Naeff & Co. Both products are indicated for use at a rate of 2-6 grams of the concentrate per 100 litres. Exaltolide is mainly indicated for use in lotions, powders and creams and will age with the perfume to which it has been added.

Synthetic Civettone is mainly used in diluted alcoholic products, such as lotions, at a rate of 2 grams of the concentrate in 100 litres of perfumery goods.

The three fixatives mentioned above are so strongly scented that they may be included at minimum rates in perfumes, where their notes will be felt only very slightly in the entity of compound.

In addition to the pure synthetics, Firmenich & Co. have developed products named *Thibetine* and *Civettine concrete* which are used as alcoholic infusions and combine the synthetic with natural animal components.

Contemporary perfumery experts of France hold the opinion that the conditions ruling on today's perfume production—particularly the widespread use of synthetics that include no fixative in themselves—will finally lead to a complete modification of our fixing technique. The mere addition of a musk compound will no longer do, they say. Of all essences, absolutes and synthetic compounds the perfumers of Grasse attempt to create *one individual fixative for each type of perfume*. Thus, they feel, they will finally provide modern counterparts and equivalents to the natural fixatives which we have found to be so richly available in the natural flower absolutes.

To illustrate this new idea in perfumery, we present a series of formulas of new fixatives which should, of course, be modified to suit each individual case and perfume.

The basic principle adopted in France is, that in the future, the minimum of fixative indispensable in a perfume of quality will be 20 parts of fixing agents to go with 80 parts of volatile components.



Castoreum from beavers is a component of some formulas.

#### FORMULARY OF FIXATION

##### Jasmin Fixative

Resinodor of Tolu	120 grams
Resinodor of Labdanum	130
Resinodor of Peru	80
Resinodor of Auropanax	20
Resinodor of Benzoin	100
Crystallized Indol	2
Hydroxycitronella	50
Aldehyde C-11	2
Jasmin Absolute	126
Heliotropine	40
Ylang-Ylang Absolute	30
Civetone	90
Amber Tincture	210

##### Rose Fixative

Resinodor of Benzoin	200 grams
Resinodor of Oliban	100
Resinodor of Iris	20
Vetyverol	50
Cedrol (crystallized)	50
Cedryl acetate	50
Benzyl isoeugenol	20
Phenylacetic acid	30
Citronellyl Phenacetate	30
Phenyl oxide	10
Absolute of Morocco Rose	150
Amber tincture	125
Civet tincture	125

##### Orange Fixative

Resinodor of Benzoin	150 grams
Resinodor of Tolu	50
Resinodor of Labdanum	100
Ess. of Sauge Sclaree	50
Resinodor of Vanilla	50
Methyl naphthyl ketone	50
Phenethyl phenacetate	25
Orange Absolute	200
Muscane	25
Musk Tincture	150
Amber Tincture	150

##### Lemon Fixative

Resinodor of Nezoïn	100 grams
Resinodor of Tanka	10
Resinodor of Labdanum	200
Isobutyl benzoate	100
Essence of Sauge Sclaree	50
Ethyl cinnamate	70
Benzyl isoeugenol	30

Methyl naphthyl ketone	60
Aldehyde C-10	5
Aldehyde C-9	5
Citral	20
Solution of 10% Exaltone	260

##### Narcissus Fixative

Resinodor Labdanum	150 grams
Resinodor Ambrette	100
Resinodor Mastic	50
Resinodor Opoponax	50
Metseresyl phenacetate	2
Yara Yara	20
Methyl naphthyl ketone	50
Phenylacetic acid	30
Heliotropine	50
Hyacinth absolute	50
Orange absolute	50
Ambrettolide	25
Angelica essence	20
Exaltone	25
Amber tincture	110
Civette tincture	218

##### Spice Fixative

Resinodor Labdanum	200 grams
Resinodor Ambrette	150
Resinodor Incense	100
Resinodor Elemi	50
Resinodor Clove	70
Benzyl isoeugenol	150
Cuminic aldehyde	20
Estragol	20
Vanilline	20
Phenylacetic acid	25
Butyl cinnamate	25
Phenylethyl propionate	25
Essence of Bay Leaf	25
Abs. of Helicryse	50
Abs. of Broom	50
Aldehyde C-11	20

##### Forest-note Fixative ("Fixative Sylvestre")

Resinodor of Labdanum	200 grams
Resinodor of Copahu	150
Resinodor of Opoponax	100
Heliotropine	100
Ess. of Cypress (third fraction)	100
Absolute of Oakmoss	50
Dimethyl hydroquinone	20
Ess. of Sauge Sclaree	50
Coumarine	50
Lavender Absolute	100
Thibetoline	80

##### Mimosa Fixative

Resinodor Labdanum	150 grams
Resinodor of Opoponax	50
Resinodor of Peru	100
Resinodor of Tolu	100
Resinodor of Vanilla	100
Heliotropine	170
Methyl anisate	20
Methyl naphthyl ketone	20
Cuminic aldehyde	10
Benzyl isoeugenol	40
Ethyl vanilline	20
Neraline	20
Mimosa absolute	150
Dimethyl acetophenone	20
Civetone 10%	80

##### Violet-Type Fixative

Resinodor Labdanum	200 grams
Resinodor of Iris	200
Resinodor of Ambrette	50
Resinodor of Myrrh	50

Ess. of Iris concrete .....	75
Ethyl myristate .....	75
Heliotropine .....	50
Vanilline .....	10
Absolute of Violet leaves .....	100
Absolute of Violet flowers .....	100
Exaltone .....	20
Tincture of Castoreum .....	70

#### Lavender Fixative

Resinodor Labdanum .....	150 grams
Resinodor Mastix .....	50
Resinodor Styrax .....	100
Absolute of Oakmoss .....	50
Essence of Sauge Sclaree .....	50
Essence of Vetyver .....	50
Decylic alcohol .....	20
Heliotropine .....	100
Lavender absolute .....	200
Myrtelol .....	30
Tincture of Castoreum .....	100
Tincture of natural musk .....	100

#### Orange-Type Fixative

Resinodor of Labdanum .....	200 grams
Resinodor of Tolu .....	100
Resinodor of Vanilla .....	50
Resinodor of Myrrh .....	50
Butyl cinnamate .....	50
Methyl acetophenone .....	20
Methyl anthranilate of Methyl .....	20
Benzyl cinnamate .....	40
Benzyl Benzoate .....	60
Essence of Sauge Sclaree .....	30
Aldehyde C-10 .....	10
Orange Absolute .....	200
Ambrettolide 10% .....	120

#### Vanilla Fixative

Resinodor of Vanilla .....	200 grams
Resinodor of Tonka .....	100
Resinodor of Tolu .....	50
Resinodor of Labdanum .....	50
Butyl cinnamate .....	80
Ethyl vanilline .....	200
Heliotropine .....	50
Coumarine .....	50
Methyl isoeugenol .....	50
Essence of Bay Leaf .....	10
Essence of Angelica .....	20
Absolute of tuberose .....	90
Exaltolide .....	50

#### Amber Fixative

Resinodor of Labdanum .....	150 grams
Resinodor of Tolu .....	100
Resinodor of Tabacine .....	100
Superior fraction of Cypress oil .....	100
Absolute of natural civet .....	25
Resinodor of Ambrette .....	125
Absolute of Tongking musk .....	25
Coumarine .....	40
Heliotropine .....	40
Essence of Sauge Sclaree .....	90
Ethyl vanilline .....	35
Thibetolide .....	20
Ambrettolide .....	30
Muscone BRB .....	20
Absolute of jasmin .....	50
Absolute of rose .....	50

Based on these formulas the professional perfumer should find it easy to compound a specific fixative for each individual type of perfume, and increase its value by extending the period of time during which it will last.

## Survey Shows Drug Stores Top Toiletries Outlet

**A**LTHOUGH it is losing its relative position, the drug store still remains the most important outlet for toilet goods, according to Prof. R. S. Alexander of Columbia University's graduate school of marketing.

In a report presented to the 18th annual convention of the Toilet Goods Assn., Prof. Alexander said that 21% of those surveyed cited convenient location as the most important reason for patronage. Twenty per cent cited the brand as the next most important reason for patronage.

The drug store was considered the most important outlet for all toiletries except nail preparations by 64% of the respondents, but a rising proportion are buying these items in other outlets. Almost half of those shifting their purchase places are now buying in supermarkets and almost one-quarter were buying from house-to-house sellers.

Department stores were ranked the most important outlet by 21% of the consumers, particularly for specialty items like perfumes, toilet waters and makeup. Variety stores were ranked as most important outlet by 8% of the consumers.

While department stores generally are holding their own, variety stores are losing more than half their toiletries sales to drug stores and about one-third to supermarkets, the speaker reported.

"Somebody has been punching a lot of doorbells," he commented, in noting an unusual growth in house-to-house sales of toiletries, chiefly in items like makeup, lotions, face powders, perfumes, toilet waters and cleansing creams.

Supermarkets and grocery stores were ranked most important by only 3%, according to the survey. Most purchases were made by buyers of toothpaste and powder, shampoos, shaving soaps and hand lotions.

Discussing reasons for these shifts in purchasing, Prof. Alexander listed in order of importance, convenience of location, brand preference, price, quality, wide selection and availability.

## Medical Association on Chlorophyll

**I**T is generally believed that most body odor is due to bacterial decomposition of sebaceous secretions on the skin. There is no evidence that chlorophyll decreases this secretion or alters the bacterial flora of the skin. Furthermore, satisfactory control tests have not been made with chlorophyll taken internally as a deodorant; thus, not only is the mechanism of action unexplained, but it is not at all certain that the action exists except in the mind of the observer.

There is no evidence that chlorophyll or the available derivatives have any harmful action. Furthermore, it should be remembered that chlorophyll is a fairly constant constituent of a well balanced diet which includes green vegetables. Finally, one should consider the fact that many herbivorous animals, including the goat, consume large quantities of chlorophyll, and some of these are noted for their pungent aroma.—*Journal of American Medical Assn., Queries and Notes.*

# Testing Cosmetic Preparations

*How to compare each batch with control batch, previous batches,  
and control bath. . . Factors in marketing a product successfully\**

DR. STEFAN KARAS

WHEN one speaks of the testing of cosmetic products, several different concepts are involved. A product must be consumer tested, to determine whether it will have acceptance in comparison with other materials either on the market or under consideration. Furthermore, materials are market tested, which may well be considered one aspect of consumer testing. Cosmetics are tested for their possible deleterious effects, in order to demonstrate that they are entirely harmless to the user, when used for the purpose and in the manner indicated. Finally, there is the analytical test, to determine that each batch of a product is so similar to the control batch and the previous batches as to be indistinguishable to the customer. It is this last-named aspect of testing that will be briefly discussed here in this article.

## *Usual Methods of Analysis Not Applicable*

In a general sense, cosmetics do not lend themselves to the usual methods of analysis to the extent that other chemical bodies do. However, some of the physical and chemical methods of analysis are applicable, but merely supplement, and do not replace, other test procedures.

For example, it is necessary, for certain types of cosmetics—particularly face creams and lotions—to make accurate measurement of viscosity. For other products, melting points are determined; certainly no one would overlook the importance of pH control. But in putting a cosmetic product through the usual tests in an analytical laboratory, emphasis must be placed on procedures that are of secondary importance, or nonexistent entirely, in other branches of chemical industry. These can be summarized under a few headings, as follows:

- a. The stability of the emulsions.
- b. Stability of the total product, so far as any change in its structure during shelf stay is concerned. This involves particularly a study of the effect of variation of temperature.



Purity of ingredients, moisture and perfume must be considered in testing color in face powders.

- c. The question of separation, as it applies to semi-liquid products, as hand lotions, foundations, and others.
- d. The deposition of pigments which, in a liquid or semi-liquid cosmetic, will tend to go to the bottom.
- e. The evaporation of moisture and the separation of lanolin, as in a cream, where the lanolin may tend to go to the top.
- f. The stability of the perfume, both so far as its own odor character is concerned, and so far as it affects the other substances.
- g. The hardness of the solid products, the ability of the product to be taken up by the finger or the puff, and the freedom from brittleness or softness.
- h. The stability of the color.
- i. The freedom from rancidity.

## *The Stability of Emulsions*

In order to determine that an emulsion will remain stable, under the normal conditions of storage and use, and for a reasonable length of time, rapid testing is carried out with a centrifuge. Ten to fifteen minutes of centrifugal action will show whether the oil phase will tend to be separable from the hydrophilic phase. A stable emulsion should endure high-speed centrifugal action for a period of fifteen minutes, with no sign of

\*Concluding article in a series of twelve discussions on primary functions of cosmetics and factors involved in their manufacture.

water at the bottom of the tube. The same test can be applied to determine whether pigments will tend to separate; in which case the pigments, rather than the water, will be found at the bottom of the tube. Actually, this is a test to determine how strongly a solid particle is held in suspension. It is a widely used test in the cosmetic industry, and exact experimental procedures are available in the analytical chemical literature.

#### *Temperature Variations*

The effect of changes of temperature on the cosmetic product is most important. The very narrowest limits that a product should be able to endure are approximately 25°F., to which it may be subjected during the Winter, during transportation, or during its stay on a shelf in a store, particularly overnight or over a week-end; and at the other extreme at least 85°F. Actually, these limits are quite conservative, for it is not uncommon for temperatures to fall slightly below zero and to rise at other times to 100°F., in different parts of the United States.

However, the test of a product subjects it to certain rigorous procedures that more than compensate for the narrow limits that we suggest; namely, changes in temperature are brought about very rapidly, with a material being placed from one extreme to the other within a period of about twenty-four hours. If such a procedure is carried out for a one-week period, stability toward changes in temperature can be amply demonstrated. If there is no flocculation, crystallization, and separation, and no other analyzable or observable ill effects, it can be assumed that the product has a reasonably good chance of remaining stable during transportation, storage, and use.

Nevertheless, rapid testing is not and can never be a duplication in the laboratory of conditions to which a product will be subject. The laboratory conditions are controlled, temperature changes are sudden, but the product is subjected to such extremes in the oven and refrigerator only for a short period of time. One cannot assume that a product satisfactory under such laboratory testing, rigorous as it may be, will give no difficulty in actual use.

Most of the emulsions and creams are of such nature, in composition and texture, that it is hardly possible to replace shelf testing, particularly of an emulsion. Shelf testing not only may give warning against a product that has been satisfactory in the laboratory, but the opposite may also occur. On the shelf and under conditions of actual use, it may be entirely acceptable, and yet it will fail to stand up in the laboratory. Particularly when this involves emulsions, which for the most part are colloidal mixtures, the behavior of a product is unpredictable until actually put into use, on a pilot or test scale, and until it remains in use over a period of several months, in different sections of the country and at different seasons of the year.

#### *Evaporation of Moisture*

When the temperature rises to a point between 70 and 100°F., there is a tendency for the water in the emulsion to evaporate, thus causing a tendency toward breakdown of the emulsion. The shrinkage of the product can be observed and measured; also observable

is the formation of a foamlike layer and in some cases a crust at the top.

This tendency of the moisture to evaporate can be tested in an oven, and should be carried out in a tightly sealed, completely enclosed jar. The loss, if any, of the moisture, in creams such as deodorants, can be counteracted by changes in the formula through the increased use of humectants, such as glycerine, sorbitol, polyethylene glycol, and so on.

#### *Separation of Lanolin*

Most of the cosmetic products that contain lanolin give a certain amount of trouble, on account of the fact that it is easily separated from the waxes and oils that are part of the fine emulsion. Many creams, during a shelf stay, will show a sort of yellow tint at the top. This can be tested at the same time as one tests for the effect of temperature change in an oven. If lanolin tends to separate at the top, this can be remedied by the use of a greater amount of polyoxyethylene derivatives of lanolin, or admixtures of polyoxyethylene sorbitol which, for reasons which have not been properly understood or explained up to the present time, will hold lanolin in suspension and prevent it from rising to the top of a cream.

#### *Color Stability*

Color stability involves primarily a light test, and is important in all tinted materials, but particularly those which contain water-soluble colors. However, some of the emulsions are on the alkaline side, requiring colors that remain fast in that medium, thus making it necessary to investigate the stability of the color in relation to the pH.

Of the water-soluble colors, the eosin types are the most stable to light. However, they have a drawback in that they are too purple, and the mixture with some yellow is recommended, particularly if a peachlike tint is desired.

The testing of color in a face powder involves a particularly strenuous and somewhat tedious study. One must take into consideration the purity of the face powder ingredients, its moisture, and its perfume, as the latter is troublesome as a product tending to discolor many lake colors. Naturally, one might recommend the elimination of lakes, but they are actually indispensable in face powder as they alone give bright shades. Mineral colors are quite often predominant, but they require a complementary addition of lakes.

#### *Hardness*

A test for hardness is indicated for compact rouges, lipsticks, mascara, and other products. Ordinary rubbing of a puff against the compact is one of the crude but necessary tests to which such a product must be subjected. The compact should be tested to determine if it is of the same hardness at all points. During the course of manufacture, one side may have become harder than the other. There is a deception in the appearance; under the pressure of the die, the compact is made to look alike at all points. A test with finger nails will determine whether the latter can be forced to the same extent into the compact at all points and on all sides, when a given amount of pressure is exerted.

When a compact drops on the floor, it is expected to



DR. STEFAN KARAS, consultant, is the author of this concluding article in a series on primary functions of cosmetics and factors involved in their manufacture.

break, and it would certainly not be sufficiently hard if it did not break upon being dropped. However, the compact should not completely shatter upon being dropped; if it does, this is an indication of faulty manufacture, and particularly of insufficient or poor quality glue in the metallic cap.

Actually, this is a very practical test, reproducing in the manufacturer's plant a situation that unfortunately occurs quite often in the consumer's home. A compact dropped accidentally by the customer should not be completely ruined.

To test such a solid product as cake mascara, ten to twenty strokes with a wet brush are made, to determine whether the cake is made evenly, whether it permits evenness of stroke, and whether it is taken up on the brush in the manner in which it will be used.

Cream rouges are tested for their hardness in an oven and if, at a temperature of 80°F., they become semi-liquid, the product will certainly be unable to stand summer storage on the shelf, and requires some drastic change of formulation.

#### **Perfume Testing**

Unlike most other aspects of testing, the perfume evaluation requires study by a group of people, preferably working independently of each other. There is no short cut for such a test. The material must be tested after a period of several weeks, or even months, and after being subjected to changes of temperature, particularly the higher temperature. At that time, comparison with a freshly made batch can be made, and side by side it is possible to determine whether any noticeable change in the odor has taken place.

At the same time, odor is one of the best tests for rancidity, especially for creams containing vegetable oils or emulsions containing unsaturated fatty acids, such as oleic, or emulsions made with stearic acid that has been poorly purified or of a poor grade. Within a period of one month in an oven, and at a temperature of at least 70°F., rancidity will show up if it is a product subject to becoming rancid. There is no better test for rancidity than the odor test; the lovely perfume will have completely disappeared and will be replaced by a sour and foul-smelling odor.

In testing the perfume and its value as a pleasant fragrance, one should take each product separately. The same perfume which is good for face powder will certainly not be good for creams or emulsions, precisely

because of the possible effects on stability; the same is true when the medium is changed; perfume suitable in an alcoholic medium may not be satisfactory in an emulsion containing a high percentage of water.

#### **"Pourability"**

The ability of a product to be poured, in an even stream of a given thickness, is quite distinct from the matter of the viscosity. It involves primarily the question of the construction of the emulsion. What must be measured is the thinness or thickness of the stream, and this is directly related to the need to place a product in a bottle or jar with a thin or thick neck. Some products flow in the form of drops or droplets rather than as a steady stream. The only test of value is one that takes place in the jar in which such a cosmetic is to be marketed.

#### **Air Bubble Tests**

The best test for the admixture of air bubbles is a sound test, in which a metal instrument, such as a knife or fork, is used to strike lightly against a glass container. Only experience can teach a person to recognize the air bubble content from the sound produced, just as experience is necessary to recognize odors by smelling them. It can be said, however, that the sound of metal striking glass, when there are many air bubbles in the jar, is a hollow one. By testing with a centrifuge, in which the number of cc of foam rejected by centrifugal force is measured in a graduate, one can verify the sound test.

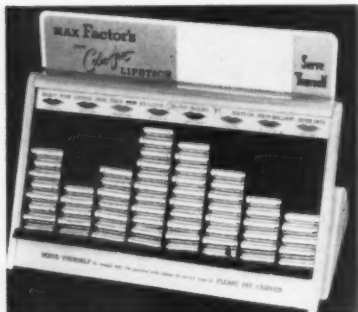
#### **Shelf Tests**

So far we have spoken primarily of oven testing and refrigeration testing. There is no complete substitute for the shelf test. A product that is left on a shelf over a period of months or years, in different seasons, and observed from time to time, may show signs of change that are not seen in the rapid tests. Although it is not practical to submit each batch to such lengthy observation before it is sold, if a product that has just been made in the laboratory for the first time, with a given formula under certain conditions, is placed on the shelf at the same time as other samples are sent out for study among consumers, for determination of safety, and for other reasons, then by the time it is ready to be marketed, if it should reach such a stage, the period of time that has elapsed is sufficient to indicate whether it will stand on the shelf without change for months or years.

In observations made on such products, the various angles of view should be used. Look at a jar from the top, sides, and bottom, turn it upside down, shake it, watch it settle. If something has occurred during the course of storage, the fault may lie with the container, especially the plastic ones, which react with the ingredients of many cosmetics. Caps, too, may often be responsible for the deterioration of many cosmetics, particularly creams.

If the cosmetic product has been well formulated and carefully manufactured, this will be verified by proper testing. And if such testing is successful, it is one of the indispensable forerunners—although by no means in and of itself a guarantee—that a product can be successfully marketed.

MAX FACTOR has developed and patented a self-service lipstick dispenser consisting of eight columns each with its own lipstick shade, and a mirrored strip with sample



Self-service lipstick dispenser

lipstick colors above. The customer may remove the lipstick by pulling a cigarette machine-type lever. The entire dispenser may be chained to the counter, and the unit may be locked to prevent pilferage.

HARRIET HUBBARD AYER is the god-mother of an Ideal Toy Corp. doll which comes with a full line of Ayer cosmetics. The doll make-up kit contains a miniature packet of cleansing tissues; eye shadow, rouge, lipstick and eyebrow pencil, all of which may be removed from the skin-like doll by Cleanse-Ayer; and a stick of perfume. The doll's hair is washable and may be curled; a set of curlers comes with the package. The Harriet Hubbard Ayer doll comes dressed in several costumes, and is accompanied by a complete instruction booklet.

REVLON introduces a new phosphorescent nail enamel and blending non-smear lipstick shade, called Crazy Pink. The nail enamel requires an undertone and a color-tone. Two bottles together sell for \$1.50; the lipstick is \$1.10.

LENTHERIC has launched a fall promotion campaign for Tweed fragrance and Pippin Red make-up, tying in with Glentex' Tweed and Pippin Red scarves, Walter Florell's Tweed and Pippin Red hats, Wear-Right gloves, Style-Art handbags, and Topaz Tweed hosiery; Nashua Corp.'s Tweed napkins, Montag writing paper in Tweed design, Marvella's Pippin Red necklace, bracelet and earrings; Sarong girdles with garters studded with Pippin Red simulated stones; Jayson Shirts, Pippin Red Hillman-Minx convertible, with Tweed slip-covers, and a dance created by Fred Astaire's Studio, Doin' The Pippin, to the Meet Miss Pippin tune. Len-

theric will also sponsor a Traveller's Aid Pippin Red Ball in September, and will conduct a Miss Pippin of 1953 contest with, as Grand Prize, a trip abroad via Trans World Airlines, and other prizes. Drug and department store window display contests will also be conducted.

HELENA RUBINSTEIN is repeating the annual sale of Beauty Pairs, ten combinations consisting of two related products for the price of one.

SHULTON introduces a new gift set in its Desert Flower line, a combination package containing new Hand and Body Lotion and Toilet Water in a green gold and white stand-up box, at \$2.50.

RICHARD HUDNUT is distributing Children's Home Permanent



Hudnut's Children's Home Permanent

through department and drug stores. The blue folding carton package, retailing for \$1.50, contains Waving Lotion, Beauty Rinse Neutralizer, end papers, and a direction folder.

SMITH, KLINE & FRENCH LABS. is introducing Acnomel Cake for acne patients with sensitive skin. Recommended for blond or dry, sensitive skin, and to mask acne lesions, it may be used as makeup alone or as foundation. It contains 4% sulfur, 1% resorcinol, and .25% hexachlorophene in a washable, flesh-tinted cake base. Acnomel Cream is offered for acne patients with oil skin. It contains 8% sulfur, 2% resorcinol, and .25% hexachlorophene in a grease-free, flesh-tinted vehicle. It comes in a specially lined 1½ oz. tube.

B. S. GILBERT PHARMACEUTICAL CO. is distributing Manoline for burns, scalds, eczema, chafing, ivy poison, hives, itching piles, prickly heat, sunburn, frosted feet, chapped

✱ *New*

hands, mosquito bites, and all irritations of the skin; also for use as toilet cream, shaving and after shaving, and to removed dandruff the firm announces.

LADY ESTHER, LTD. will run its third consecutive annual fall promotion on Lady Esther Four Purpose Cream, September 15 to December 15. The \$1.38 size will retail for 98 cents. Dealers are also offered a single special counter unit displaying both the Four Purpose Cream and Lady Esther Hormone Cream, with one jar of 59 cent Hormone Cream as bonus. As part of a \$450,000 advertising campaign, the products will be plugged via extensive newspaper space and a new weekly NBC television show.

AR-EX COSMETIC CO. offers new Ar-Ex Enriched Night Cream, said to contain cholesterol. It comes in both scented and unscented form. The cream is priced at \$1.50 for the two-ounce size and \$2.50 for the four-ounce one.

DORCANA COSMETIC CO. is marketing DorCana Cosmetic Cream, recommended as skin softener, cleanser, powder base, and night cream. The product contains lanolin. It comes in four and eight ounce sizes.

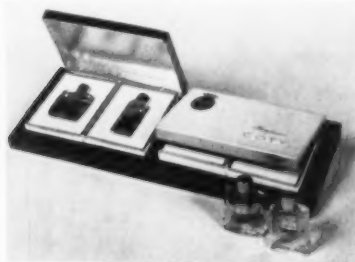


DorCana Cosmetic Cream

# Packaging & Promotions

MAX FACTOR is launching a nationwide advertising and publicity campaign to back its new fall lipstick shade, Riding Hood Red, on the "bring the wolves out" theme. The Color-fast lipstick will be backed with four-color double spread advertising in national magazines, national ads in local newspapers, window, counter, and department displays, and cooperative advertising. Tie-ins of the shade with garments of numerous fashion manufacturers have also been secured.

Coty pairs four perfumes in its new "Two by Two" package. One separate removable box holds L'Ai-



Coty's Two by Two

mant and Emeraude, the other L'Origan and Paris, each in a replica bottle of the full size one. The entire package sells for \$3.50.

Q-TIPS SALES CORP. features new, longer, slimmer Q-Tips for applying make-up. Orchid color packages containing 128 Q-Tips retail at 89 cents. A women's magazine and Sunday supplement advertising campaign has been scheduled for early September.

PLOUGH SALES CORP. offers a free 35 cent jar of Mexsana Skin Cream with each 70 cent package of Mexsana Medicated Powder. A counter display carton holds 12 combination packages. Mexsana Powder is a heat powder to relieve the sting of prickly heat, chafe, minor skin irritations, and athlete's foot; Mexsana Skin Cream soothes sunburn, and may be used as foundation base, brushless shaving and after-shave massage.



Pond's new hand lotion

POND'S Extract Co. is launching a new hand lotion, called Angel Skin, with over a million dollars in initial advertising, in preparation for the product's introduction in October. It is described as non-sticky and non-greasy, quick-drying, and with slightly acid pH for deeper penetration. The product was sales-tested in five markets in 1952. Advertising will include national women's service, fashion and romance magazines; and television and newspapers in 25 major markets. Extensive sampling will be done in consumer groups to supplement advertising coupon offers for test size.

HOUBIGANT offers a trio of Quelques Fleurs hand lotion, each tinted differently. The three bottles in a transparent plastic package sell for \$1.

TUSSY COSMETIQUES will introduce Beauty Touch, a pressed cream powder with built-in foundation, in October. It comes in six shades matching corresponding Midnight Face Powder shades. Packaging is a black polystyrene compact decorated with a single rhinestone. The product supersedes Powder Pat. The retail price is \$1.25.

LADY ESTHER, Ltd.'s new face powder shade is Honey. An ad campaign will cover 11 confession and movie magazines.



Worth perfume

PARFUMS WORTH CORP. is re-introducing its line of France-bottled perfumes. Scents are Dans la Nuit, Je Reviens, and Requete.

HELENA RUBINSTEIN offers Lanolin-Vitamin Formula with vitamin A and lanolin, described as a greaseless liquid against skin scaliness and dryness, for day and nighttime use. Amber tinted glass bottles sell for \$1.50 and \$2.50.

RICHARD HUDNUT is marketing Triple Treat, a package with three long-lasting lipsticks in different shades, at \$1.25.

ROSE LAID is distributing two products with teen-age appeal through Macy's and McCreery's, New York department stores. One is Liquid Lather, a soapless cleanser to prevent skin blemishes, at \$1.25 per 4 oz.; the other is Protective Make-Up Film, an antiseptic make-up to serve as foundation cream, make-up base and face powder, while concealing blemishes. The latter item sells for \$1.50 per 4 oz.

SHULTON, INC. introduces Shower Soap with neck cord attached in its Old Spice for Men line. A 7 3/4 ounce cake retails for \$1. Another new addition to the line is a gift set consisting of lather shaving cream, called Smooth Shave, in an aerosol, After Shave Lotion and Talc, selling for \$3.

PRINCE MATCHABELLI is including a gift crown of Beloved Perfume with both the two ounce and four ounce crowns of Beloved Cologne Parfume. The four ounce, \$4 size is accompanied by an one dram, \$2.50 size perfume; the two ounce, \$2.50 size comes with a 1/2 dram, \$1.50 size of perfume.

TONI CO. announces that according to a Market Research Corp. of America report White Rain lotion shampoo reached a high in May by moving up to second place in share of market among all shampoos sold in the United States. The product has also celebrated its second anniversary.

*Bouquets  
to You*

With  
*Florasynth's*

**BOUQUET 1950**

Bouquet 1950 is the modern  
interpretation to a fresh,  
modern scent . . .  
the search for the new  
and intriguing . . .  
distinctly different . . .  
timed for successful  
products . . . all-ways . . .

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Florasynth Labs. (Canada Ltd.)  
Montreal • Toronto • Vancouver • Winnipeg  
Florasynth Laboratories de Mexico S. A. - Mexico City

# WHAT THE RETAIL BUYERS REPORT

## Demonstrators Show Make-up Techniques to Women Workers in Mid-West Plants

JEAN MOWAT

**Chicago**—Leading manufacturers are invading the industrial plants with their top instructors, showing women workers how to apply make-up and how to get most for their cosmetic dollar.

### Department Tie-ins Often Lacking

Sales of cosmetics for children are hampered in some department stores because executives don't want items from one section to be featured in another. Sales to college girls are often similarly hit. Cosmetic bars in the right places could do much to raise deodorant, cleansing creams, powder, rouge, and fragrance sales. Such stores as Dayton's The Golden Rule, and Hudson, located in large and important college areas, find that it pays to suggest fragrances for school and college wear.

While these girls are still being indoctrinated into the correct use of cosmetics, they are buying squeezable bottles and the aerosol types but their comments among themselves are not anything to make the makers of these containers happy. Even career women are against them and dislike their use, and only use them for certain preparations.

The only reason that the plastic types of bottles are liked is for their weight. Apparently, from the

comments of buyers and customers, there is much to be done in the way of perfecting containers before the old-fashioned and heavy jar will be eliminated both from the cosmetic kit and from the home shelf. The return to tubes by some of the products is liked and it may be expected to increase.

With more and more women flying and wanting to carry more apparel than cosmetics the tubes permit ease of packing, and also allow these to be discarded after use without any qualms. Traveling women are also asking for such containers, and yet they prefer the glass container for their fragrance.

### Self-Service and Information

As the self-service idea in cosmetic departments continues to gain, because of lack of help and even more so for lack of intelligent selling, women need and must have more information as to contents and use if there be repeat business, and in fact if an individual first sale is to be made. One thing that all merchandisers are discussing these days is the way women want to know "contents" and what it will do for them. Only the manufacturer can render this service and buyers in the Middle West are of the opinion he should begin to do something about it immediately.

## Dallas Bids for Mail, Phone Order Business as Hot Weather Hits Store Traffic

JEAN ROBERTS

**Dallas**—Nothing much is going on in the cosmetic field during this time of the year. Counters are displaying a little of everything pertaining to summer.

Because the hot weather keeps most shoppers in their air-conditioned houses or offices unless they have a real need for an item, newspaper advertising is getting a big play. Several large ads, jointly

sponsored by a national firm and a local store, have appeared in local papers. Aquamarine lotion did good mail order business with a full page ad in color.

Since stores are bidding for telephone orders, the tendency is to feature a number of different items in one ad rather than to concentrate. Sometimes there is a tie-in theme, such as the Neiman-Marcus ad "have a safe, beautiful 4th"

Many stores stress mail, telephone orders as hot weather hits their traffic.

Soaps, deodorants, hair goods, summer scents top sellers.

Quality lines enter drug-chains, but first sales are seen largely made in service stores.

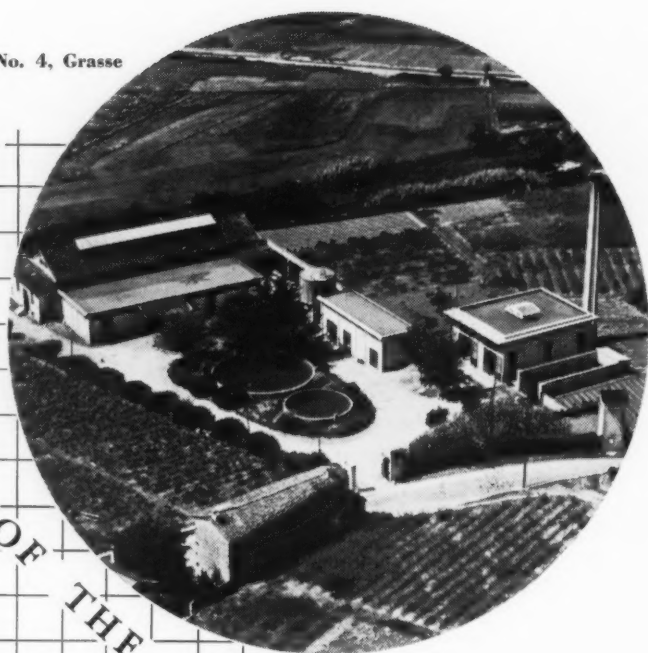
which featured six products likely to be needed over a holiday weekend: Elizabeth Arden's "Sleek" for the legs; Arden's Protecta Cream and Suntan Oil; Charles of the Ritz' Sunbronze and "Bright Pink" lipstick; Cop'r glo, the sun filter lotion; Antoine's hair fixative; and Revlon's manicure set in straw bait box. But most just featured an assortment of summer items.

### Rubinstein in Chain-Drugs

The chain-drugs added another important name when Skillern's announced the addition of Helena Rubinstein cosmetics on their shelves. This follows a trend that has been growing here. Both drug stores and grocery stores are developing extensive cosmetic departments, particularly in their suburban stores. This handy service pays off particularly in the summer and many leading lines are now being handled by these chain drugs and groceries. Some attempt has been made by some chains to educate sales clerks who handle these counters so that they have somewhat the same background as the trained clerks in the downtown department stores. Such effort, however, is still relatively rare. For the most part the customers who buy cosmetic items from drugs or super markets have a certain product in mind and know its use.

Department store heads believe their policy of keeping clerks trained in the uses and products of particular lines will continue to offset encroachment from the

Factory No. 4, Grasse



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Bertrand Frères' Lavandin Plantation

An entire range of  
floral concretes and absolutes,  
resinoids and  
essential oils.

*We welcome your inquiries on  
any specific product or process.*



**Bertrand Frères, Inc.**

443 FOURTH AVENUE  
NEW YORK 16, N.Y.

chains even while they add important lines. Several stores have featured their consultant service in ads, encouraging customers to call their orders in so they can ask questions instead of mailing them in.

Hair preparations continue to be advertised extensively—shampoos, conditioners, color-tones, home permanents. Spray deodorants are selling well with Stopette holding a good lead in most places.

Now that Father's Day is over, stores have taken a look at results. Most find that sales of men's cosmetics were up a little over last year's promotion, but still need lots of work to bring it anywhere near Mother's Day in volume.

The stores in general report that business in Dallas this month is slightly better than for the same period last year.

### Sales Sluggish in New Orleans

LEE MCKENNON

**New Orleans**—Totalling up sales, buyers in most of the stores here have found that the expected last minute Father's Day rush did not materialize, much to their dissatisfaction. The majority report that graduation gifts account for much more of their men's cosmetic business than Father's Day. One of the smaller and more exclusive stores here did report very nice business with an excellent sale of Faberge after-shave lotion and cologne and Charbert's beautifully packaged men's toiletries, but this store was the exception on Canal Street.

#### Cash Registers Quiet

It's possible that the slow Father's Day trade is just a part of the over-all quiet experienced here in cosmetic sales. Most buyers are complaining about it and hope sales will soon pick up since they are below last year's volume.

At one department store where purchases were otherwise disappointing, the King's Men duo of After Shave Powder and After Shave Lotion for \$2 went very nicely, the buyer commented. She said the two bottles packaged together seemed to draw attention and sales but felt it is significant that these items were advertised on television in New Orleans just prior to Father's Day. Television draws immediate response here and the buyers are delighted to have such advertising.

There are other bright spots and one of these is the good sale of Elizabeth Arden's Blue Grass special at one of the larger department stores. Her Fluffy Shampoo is also selling very well, the buyer said. It comes in the \$1.33 size and the \$2.00 size and the customers report that it gives the hair body, at the same time leaving it fluffy—a condition women seem to enjoy and they continue to buy this yellow shampoo in its squeeze bottle.

Revlon's specials of Aquamarine Lotion Deodorant and Aquamarine Mist for \$1 as well as the Aquamarine Spray and Mist

for \$1 are going very well at another large department store. The Chip-Less Enamel and Non-Smear Lipstick packaged together, a \$1.70 value for \$1.25 is also selling very well at the Revlon counter. Revlon has a beautifully packaged child's kit containing natural-color nail enamel, paste polish, a buffer, emery board, orange stick, cotton pads and aquamarine lotion for \$2.25, which is selling nicely.

Estee Lauder's Bath Oil and Lotion Sachet are selling extremely well, another buyer comments, and Antoine's Bain de Soleil is going in an excellent volume, as it did last season.

### Wide Variations in Store Traffic Reported; Summer Fragrances, Hair Goods Top Items

MAGGIE FLEMMING

**Buffalo**—As if toiletries business in Buffalo were not often sufficiently all-round confusing anyway, it has chosen this month to become "split-up confusing" . . . with some stores far exceeding the volume of preceding months, and others hardly making their normal expectancy . . . and all this without any special "Specials" to account for the volume exceeders.

Oppenheim and Collins' figures are well over those of the past four months, and much better than those covering this same period of last year. Advertising could not be held accountable, for none had been carried. No particular items were outselling the others, to speak of, but Dorothy Gray and Tussy were possibly nosing out other lines a wee bit with their \$2.00-size summer colognes currently selling for \$1.00.

Hair goods were a top item at J. N. Adam's, with Lilt, Roux, Hudnut's True Tint, and Rubinstein's hair spray showing good steady turnover. Pre-vacation groupings of soaps and tissues stimulated volume here, and the summer items in the self-service section were far surpassing the popu-

larity they established in this section last year at this time. These included suntan lotion, and bathing caps.

The Wm. Hengerer Co. reported a comparatively slow month. The only items which attracted buying interest of note included My Epil, the wax depilatory priced at \$2.00, Charbert's \$2.00 bottle of Breathless Mist cologne being sold at \$1.00, and the first two mid-week days of the 4-day Revlon Nail Clinic.

#### Stick Decline

Solid colognes are more and more on the decline, with a minimum of them being stocked due to the decrease in their popularity. This decrease was attributed to the fact that some solid colognes dry up faster than should be expected, the liquids in others leak out, their fragrance is more fleeting than that of liquid colognes . . . and the public naturally does not fancy any of these didoes. Perhaps if manufacturers overcame these difficulties, they could boost solid colognes back up to the high acceptance they enjoyed when first originated. But without this effort, "solids" seem slated for a quick, long-lasting sleep.

### Hot Weather Items Hot; Colognes, Bubble Baths, Liquid Cleansers, Home Permanents Walk Out

MARY LINN WHITE

**Cincinnati**—Heat or no heat (and it was intense), customers flocked to town and cleaned the counters of many hot-weather items.

Items specifically labeled "hot weather," such as Dorothy Gray's colognes and Tussy's, vanished from the counters and shelves rapidly. McAlpin's reported a run on bubble baths. LeLong's stick cologne at half-price was selling well at

for



MILDER COSMETICS

## MAYPON 4C

**A HIGHLY PURIFIED  
PROTEIN—FATTY ACID—CONDENSATE**

*satisfying the Draize-Woodward eye irritation  
test in all concentrations*

**ANIONIC • LIME STABLE • HIGHLY SUDSING**

### Specifications

Form and color ..... Light tan clear liquid  
Specific gravity ..... 1.070 to 1.090  
Solids ..... 35 to 37%  
pH ..... 6.3 -7.3  
Active Ingredients ..... (approx.) 33 to 35%  
Solubility in water ..... In all proportions  
Iron ..... Less than 20 p.p.m.

### Applications

Shampoos  
Permanent cold wave solutions  
Liquid bath preparations  
Cosmetic creams

**MAYWOOD CHEMICAL WORKS**

**MAYWOOD, NEW JERSEY**

ESTABLISHED 1895



Above, members of the Better Merchandising Panel, which proved to be one of the highlights of the Canadian Toilet Goods Mfrs. Assn. convention at the Chateau Frontenac, Quebec City. From left to right: D. D. MacLachlan, S. S. Kresge Co. Ltd.; G. D. Thomson, The Robert Simpson Montreal, Ltd.; Paul H. Soucy, Canadian Pharmaceutical Assn.; J. D. Young, moderator of the panel, of John A. Huston Co., Ltd.; Gordon Slein, National Drug & Chemical Co. Ltd.; E. H. Waldruff, Louis K. Liggett Co. Ltd.; and J. S. Hamilton, Richard Hudnut, Ltd.

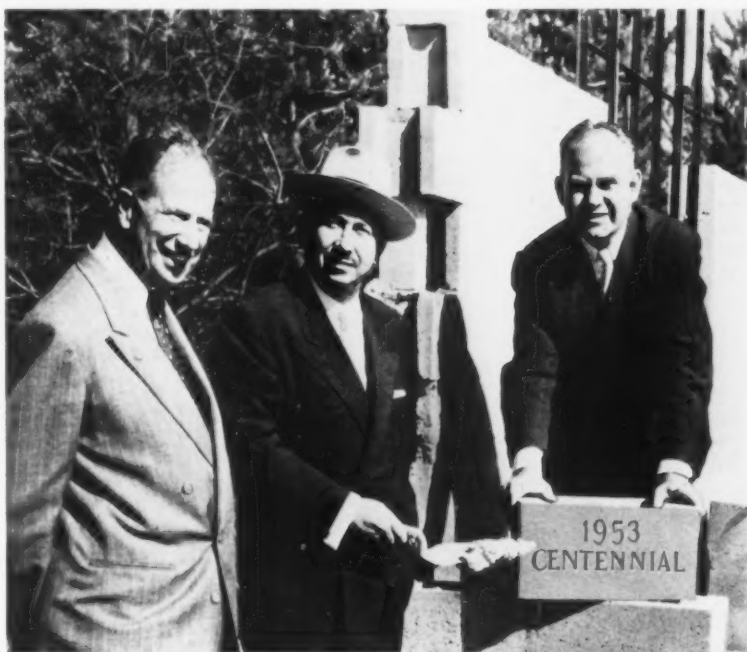
Shillito and Mabley and Carew. Though the sales of the solid scents were off earlier in the season, they were rallying, not to equal the liquid toilet waters, however. Coty's new type, with the stick twisting up and out, was popular.

#### Scents Selling

Some stores reported their best month for colognes in many moons; a couple of buyers reasoned that the various stick, spray, and other types of scents had at last made women scent-conscious. The dollar size bottle was also a factor.

Creams fell off, but women who habitually used them for cleansers apparently transferred to liquid types as the sales of them spurted ahead (Mabley and Carew).

Dorothy Gray's new cream stick deodorant was another sell-out-and-reorder item. The men preferred Shulton's stick deodorant, and were taking well to the "Smooth Shave" by the same house, a bomb-type container of ready-fluffed soap.



Chairman Lessing Kole lays the cornerstone of the new Kolmar-Wilckens plant in Barrie, Ont., Canada. Fred Wilkens, president, left; Henry Groh, general manager, right.

Cocktail and dinner party in honor of James H. McNamara, retiring dean of the sales staff of Fritzsche Brothers, Inc., at the New York Athletic Club, New York. Those present (reading clockwise from center foreground): Mrs. Elizabeth Adelmann, Thomas J. Coyle, Ray Thompson, Arthur Howlings, Robert Krone, Fred Hilbert, R. W. Wilmer, Dr. E. H. Hamann, Kenneth W. Tracy, Charles Schneider, Mrs. Theresa Spoerer, Ellis Merkl, D. A. Neary, Dr. Ernest Guenther, Mrs. Marion McNamara, John H. Montgomery, Jim McNamara, F. H. Leonhardt, Miss Mary Neary, Fred Leonhardt, Jr., H. P. Wesemann, Michael McNamara, Joseph A. Huisking, Gus Wohlfort and E. P. McDonough.



## Book Reviews

**THE ETHEREAL OILS.** Robert Leimbach & Konrad Bornot: 1951. 2nd edition 271 pages, 6x9 in. price: \$5.00.

This book in German is a short form presentation of the ethereal oils. It is not supposed to substitute the standard works of Gilde-meister and Hoffman, or the books about Essential Oils by Ernest Guenther; but its purpose is to prepare and facilitate their use. It is mainly written for chemists, who want to be informed about the different branches of the industry and can be useful to the trade and to the manufacturer who wants to be informed about specialties. In this edition new developments are covered.

During the interval between the first and second editions many new facts about the composition of the oils were found. Often, very small quantities of substances were found which proved to be of importance for its use. Many methods are discussed about the production of oils in the form of concretes and absolutes and, their extraction with volatile solvents.

Special attention is given to physiology, pharmacology and the many factors related to essential oils. The book is a valuable summary of the essential oil industry.—H.G.

**TESTING OF MEASURING EQUIPMENT.** Ralph W. Smith. 6x9 in., 205 pages, 18 illustrations, cloth covers. National Bureau of Standards. 1951. Price \$1.25.

This volume completes the series of four handbooks of the National Bureau of Standards designed to present in compact form comprehensive information relative to weights and measures regulatory activities. The present volume deals with commercial measures and measuring devices and includes descriptions of these instruments, recommendations for the testing apparatus needed for their official examination and instructions for their inspection and testing by weights and measures officials. While the handbook was prepared primarily for use by weights and measures officials it is

believed that much of the information presented will be useful to persons employed by commercial and industrial establishments in the maintenance of measuring equipment.

**THE TECHNOLOGY OF SOAP POWDER AND POWDERED WASHING MATERIAL.** Theodor Klug. 15 illustrations. 60 pages, 6x8 in. 1951. Price \$2.00.

This little book in German is supposed to serve the home user as well as the supervisor of a laundry-plant in laundry work. It includes the compounding of washing-material and its production.

Soap powders facilitate laundering as they are easily dissolved in water, are easily measured and can be easily shipped in small packages.

The author thinks that despite the many synthetic washing materials on the market now, soap will never lose its importance.—H.G.

**A LABORATORY BOOK FOR THE PERFUMERY INDUSTRY.** Dr. Oscar Simon. 4th and 5th expanded edition by Dr. H. K. Thomas 1950. 6½x9½ in., 131 pages. Price: \$3.50.

This book in German consists of two parts: 1) Investigations of the ethereal oils; 2) Determination and proof of falsifications. The methods are simple and well organized. They serve and can be easily interpreted, by the perfumer and the food chemist. These methods help the chemist who works with scented material and the specialist in sweet food and soft drinks. It can be used by the soap chemist as well. This fourth and fifth edition is improved by new chapters about essential oils and scented material and the results of new research methods have been added.—H.G.

**ARITHMETIC OF PHARMACY.** Charles H. Stocking, M. S. and Elmon L. Cataline, Ph.D. 6x9 in., 148 pages, cloth covers. D. Van Nostrand Co., 1952. Price \$2.75

Methods for the solution of many of the arithmetical problems

encountered in the practice of pharmacy. The present revised edition is based on the original text by Alviso B. Stevens, Ph. D., late professor of Pharmacy, University of Michigan. A considerable portion of the material has been rewritten and some has been rearranged although the general pattern has been preserved in this edition. In each section in the text examples are given of the methods for solving problems of the type under consideration. Chapter headings are: Weights and Measures; Specific Gravity and Specific Volume; Weight-Volume; Percentage Solutions; Dilution and Concentration; Reducing and Enlarging Formulas; Additional Calculations Pertaining to Prescriptions; Conversion of Temperatures; Commercial Calculations; Chemical Calculations; and a conveniently useful appendix covering ratio, proportion and fractions. Needed tables are also included.

**AIDS TO PHARMACEUTICAL CALCULATIONS.** Mary E. Bolton. 4x6½ in., 96 pages. Cloth covers. Balliere, Tindall & Cox. 1951. Price \$2.50.

This little book is aimed to simplify the problems and enable those who find that the arithmetic required in pharmacy is difficult to overcome that difficulty. It is a revision of the original work by A. W. Lupton and is a more general treatment of the subject. As such it is a useful reference book for pharmaceutical calculations.

**BAKING AND PUDDING-POWDER, VANILLA-SUGAR AND BABY FOOD.** Karl Schiller. 1950. 152 pages, 6x9 in., 5 illustrations. Price: \$5.00.

This book in German is a short summary about the production of sweet food; analysis and manufacturing of jello-powders, vanilla-sugar and other preparations.

Special attention is given to the aromatic ingredients used in the above mentioned preparations. Further the author discusses the field of child nutrition. The evaluation of baby food and child nutrition is still a little vague. He shows the variations of opinions. Recent research and knowledge seem to have changed long established methods of child nutrition. This booklet will be of great value to all who are interested in this field.—H.G.



## The Editorial - "WE"

### Once More On the Coumarin Question

WE recently commented on the alacrity with which industry, awaiting no government order, disciplined and regulated itself by excluding coumarin from flavor formulas, the very moment that a suspicion arose concerning its possible deleterious effects. In the few short months that have passed since the original disclosure, there have been a number of developments regarding coumarin, and a few of these are worthy of comment. We learn that the National Formulary is considering the possibility of dropping coumarin, although Dr. Justin Powers, if he is quoted properly finds "no cause for alarm in the pharmaceutical field over the coumarin disclosures, as quantities of the ingredient used in drugs normally are far less than have been shown to be toxic in animals." This statement cannot but come as a surprise to the food and flavor companies, who generally use extremely minute quantities of coumarin in their products, but who have been warned that the toxic effects may be cumulative, and it should therefore be excluded from formulas, regardless of quantities involved. It would seem to us that there is an inconsistency, and that if the drastic action of the food flavoring firms was justified, similar action by the National Formulary is definitely indicated.

Many people associated with foods, flavors, and other industries are stating that the public has been using coumarin, both in its synthetic and natural forms, for many decades, and the human race has evidently survived. This is not a very convincing argument. The ingredient might do some damage, without causing or hastening death, and because the harmful effects are brought about (if at all) only very slowly, people lived without anyone recognizing that harm. Fur-

thermore, it is not to be excluded that a material might damage the body in our generation, although it was less toxic in a previous decade. The changes in modern life, the different diet, and particularly the wide use of chemotherapeutic agents and antibiotics, might result in new concepts of toxicology. The human body is not functioning in the same manner as it did twenty or thirty years ago, and there is a possibility that materials that were sufficiently harmless for human consumption at one time can no longer be considered relatively safe when taken in the same manner and in the same quantities as hitherto.

One more word, and we shall leave coumarin, at least for the moment. It would seem to us more urgent than ever that systematic toxicity studies, emphasizing particularly cumulative toxic effects, be undertaken on all flavor ingredients and on all food colors. If information along this line is in the files of a manufacturer or a consultant, it should be published in the public interest. If it is not available, a cooperative industry-wide research project is certainly in order.

### The Trade Paper And the Trade

THE business paper occupies a unique position in an industry. It is a medium for the dissemination of news, but it is more than that. It is the means by which products are made known to those who need and can use them, but it is more than such an advertising journal. Its editors and publishers are participants in an industry, yet having the advantage of neither making nor selling the materials offered by all the firms with which they deal. This is, in a sense, an opportunity for unlimited industry-community relations. One of our colleagues and contemporaries who has magnificently risen to the

heights offered by the opportunities in our industry is Dr. Robert L. Swain. Editor of *Drug Trade News*, Dr. Swain was recently re-elected chairman of the Board of Trustees of the U. S. Pharmacopoeia, a post he has held since 1945. Our belated congratulations to a man of whom we are doubly proud, first because of his achievements in the cosmetic and drug fields, and secondly because of the leadership he has displayed as an industrial editor.

### Employees Purchase Controlling Interest

A report comes to our desk that the employees of one of America's best-known research and consulting organizations, Arthur D. Little, Inc., have acquired a controlling interest in their company. It goes without saying that in this day, when the majority of American workers are probably employed by firms that are owned by absentee stockholders, few employees can look forward to genuine ownership of the company for which they work. It is refreshing and indeed encouraging to find such ownership possible in a company sufficiently important in size to be able to refer to itself as "the largest industrial research organization of its kind." Because consulting is the type of work that depends so much on the personal creativity of its staff, it is particularly appropriate that employee ownership should have developed in this firm. That it will help the employees is quite obvious; we believe it will provide great advantages to the company and to clients as well.

### Returned Goods— A Perplexing Problem

THE distribution of cosmetics requires the cooperative efforts of all factors in industry, from manufacturer through wholesaler to retailer. The difficulties encountered cannot be solved unilaterally. They are the problems of all groups, and must be considered as such and by such. One of the most perplexing problems is that of returned goods. A very strong statement has recently been issued by the National Wholesale Druggists Association, and it is one with which we are only in partial agreement. The wholesaler must demand from the retailer proof that a product had been purchased from him, and not from another wholesaler or directly from the manufacturer, before a return is al-



THE PURSE SIZE FLACON  
THAT CHANGED THE PERFUME  
MERCHANDISING OF  
A NATION!

THE NEW  
SQUARE  
SPILLPROOF



# M E M O

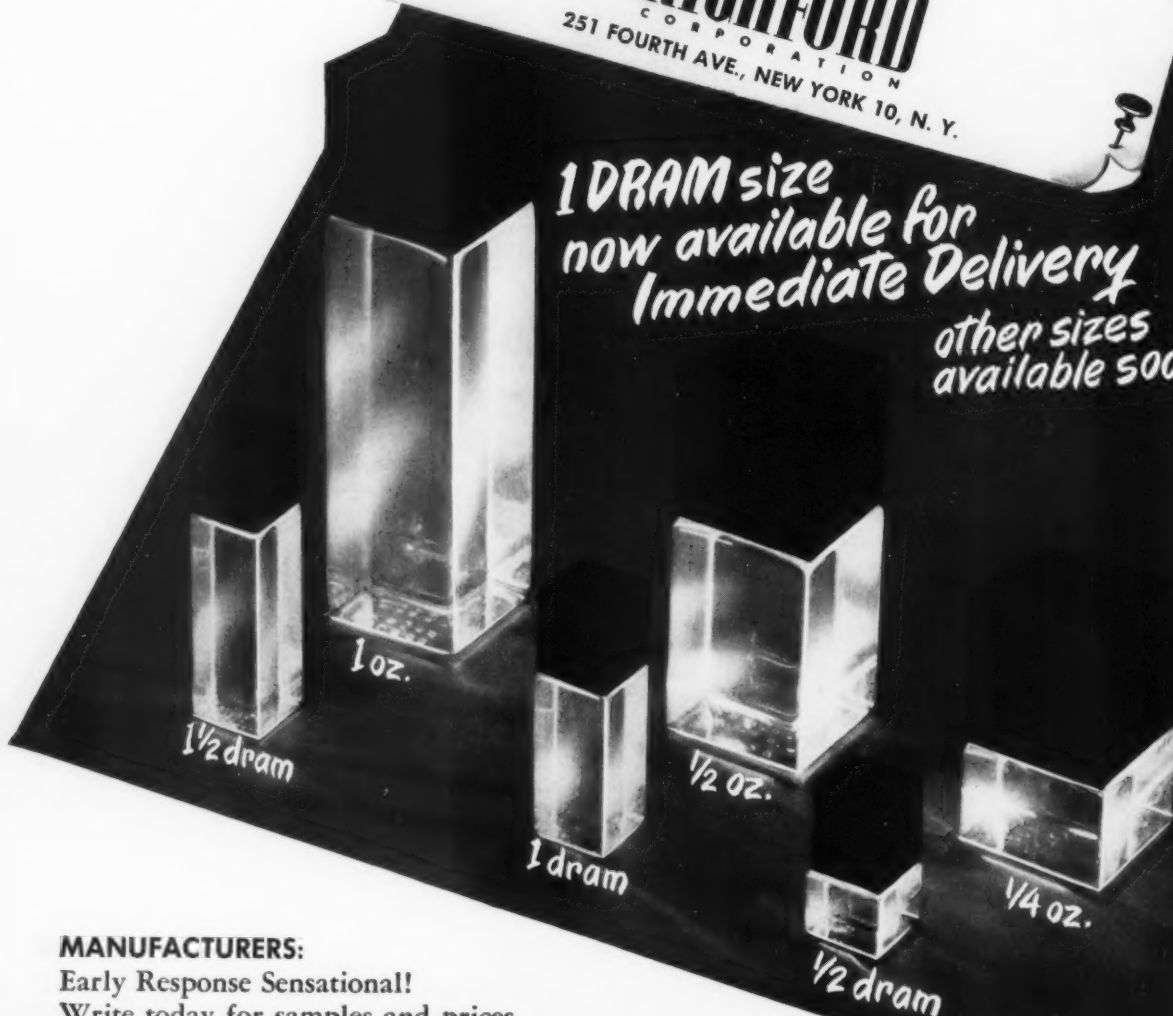
## SALES TIPS TO REMEMBER FOR BOOSTING YOUR PERFUME SALES

1. The lower unit price of expensive perfumes packaged in Spillproof purse size flacons enables your woman customer to try many different fragrances at relatively small expense. She *actually pays* to sample fragrances . . . once sold she (or the men in her life) will buy larger sizes.
2. Perfume carried daily in Spillproof purse size flacons is consumed far more rapidly than standard size perfumes left on your customer's dresser.
3. The convenient size and lower unit price of perfumes in Spillproof purse sizes entice your woman customer to carry and use both "day" and "evening" perfumes, boosting consumption even more.
4. The lower unit price of perfumes in Spillproof purse sizes enables your woman customer to accept perfume normally beyond her means in her everyday life. She no longer thinks of it as an expensive "evening out" luxury.

**RICHFORD**  
CORPORATION

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1 DRAM size  
now available for  
Immediate Delivery  
other sizes  
available soon.



**MANUFACTURERS:**  
Early Response Sensational!  
Write today for samples and prices.

lowed. Surely no one can argue with this. The manufacturer, on the other hand, the NWDA insists, must assume responsibility on merchandise that may become "outdated, spoiled or otherwise unsalable." We agree that it is the manufacturer who is responsible for merchandise that is spoiled, if spoilage is due to inherent defect in formulation or packaging, and not to negligent mishandling. But it is rather sweeping to ask the manufacturer to take sole responsibility for goods becoming outdated "or otherwise unsalable." Surely there should be a limit on the amount of time that merchandise can be held, and wholesalers and retailers should not be encouraged to place into their warehouses and stores unlimited supplies of merchandise, without any limitation on the returns.

#### **It Droppeth As the Perfumed Rain**

**A** TWENTIETH CENTURY Shakespeare would have written the lines of *The Merchant of Venice* with one slight revision. "The quality of mercy is not strain'd," the Bard would have Portia arise and state, and then she might have continued: "It droppeth as the perfumed rain from heaven upon the place beneath." Perfumed rain! Even the skies were fragrant when the clouds were recently seeded by a prominent manufacturer. We wish that it might have been possible to have an impartial group of perfumers present, to examine the rain water against other rain samples, and to determine whether the fragrance of Black Satin perfume was present and recognizable. What ever success the experiment may have had, from a scientific point of view, its publicity and promotional value cannot be denied. It is, however, ironical to us that it required an American company, with an American-developed perfume, to bring a scented shower from the skies, and that this company chose, of all places, Paris for its experiment. That is, as a wise man named Diogenes Laertius once wrote, like sending owls to Athens.

#### **Chemistry Is Asking: How Big Is Big?**

**"H**ow big is big?" asks *Industrial & Engineering Chemistry*, in its editorial of July 1953. Indeed, the chemical industry has grown, until it is ninth in size in the United States. Exactly what constitutes the chemical industry

is difficult to say, and the editor of that authoritative journal goes on to give three possible definitions. Actually, all definitions are self-defeating, because to define is to limit, and there are no limits on the chemical industry and hence there can be no definitions. We do not merely mean that there are no potential limits, that the industry can expand endlessly, but that there is no appreciable sector of American industry that is not completely dependent upon chemistry, upon chemical processing, upon chemically trained personnel. That in this bigness there is still room for relatively small industries (such as flavors, essential oils, perfumes, cosmetics) to be heard and to have their influence felt is most encouraging. Even more so is that, within these small industries, many of the smaller firms continue to play a major role, in developing new products, in shaping industry policy, and in a variety of other ways. How big is big? There is no limit to bigness, for its growth can be to infinity, but no matter how big, there is always a place for the small.

#### **Gone Are the Odors Of Yesteryear**

**T**HAT Lifebuoy is coming on the market with a new color, a new promotion campaign, a new active deodorant ingredient, and a new fragrance is a piece of outstanding news to the soap industry. But what was of special interest to us was the announcement from Lever Brothers that "the old medicinal odor is gone for good." And we believe that, gone for good are the days when a fragrance that was harsh, medicinal, pungent, even unpleasant, was considered by the public to be a necessary adjunct to a product destined to have beneficial effects upon the skin or within the body. The announcement of the revamping of Lifebuoy can be said, in our opinion, to coincide with the complete disappearance of an era in American toiletries. The soap and cosmetic products must have odor—and pleasant odor—and gone, we hope forever, is the concept that, to be good, it must smell bad.

#### **Esquire Predicts Good Holiday Volume**

**W**E are happy to learn, from a survey just completed by *Esquire* magazine, in which 132 store buyers were interviewed, that these buyers anticipate a good perfume

volume for the coming Christmas season. More than one-fourth of the buyers expect sales to be better this year than last, and of the remaining, all but a handful think that the volume will be about the same. All of the buyers placed their Christmas season as one of considerable importance in the perfume business. Finally, about 70 per cent of the buyers thought that it was of "great importance" to reach the male market because the men buy the perfume for Christmas, while 27 per cent felt it to be of "moderate importance," leaving just a miserable handful of dyed-in-the-wool feminists who feel the men can go hang themselves so far as Christmas perfume sales are concerned. By the way, the magazine is directed almost exclusively to men, who will buy all this perfume for the women this Yuletide provided they see the right brands advertised in a first-class men's magazine, but these few facts would in no way influence the impartial researchers.

#### **Salmon Are Guided By Sense of Smell**

**H**OW does the salmon find its way back to the stream whence it has come? This is a question that has plagued naturalists for many years, although it is doubtful if any salmon have been bothered by it. Along comes some very interesting and brilliantly imaginative research that indicates that the salmon has a remarkable odor memory, can smell the waters from the different streams, and makes its way back to its native water by means of its olfactory prowess. It's a simple question of the salmon just following his nose, but that it should have such remarkable smelling ability is, we believe, really one for the brooks.

#### **The Senator Wants an Aspirin**

**S**PEAKING of surveys, and we have spoken of them with quite some frequency, we recently came across one that gave information on the buying habits of the population in various parts of the country. It turns out there is a smaller percentage of the population buying headache remedies in some parts of the country than in others and that, of all places, way down on the list, with fewer headache remedies being purchased than almost anywhere else, are the people of Washington, D.C. No comment necessary.

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# New Products and Developments

## Smudge Proof Labels

A smudge proof, easy to make label that is claimed to stick without moistening to test tubes, bottles, jars and in fact any clean smooth surface is offered by Labelon Tape Co. Inc. No ink, crayon or pencil lead is required for writing on the plastic Labelon tape. The pressure of the writing instrument which can be any dry, blunt point such as a pencil or stylus causes the writing to appear beneath a transparent plastic outer layer the manufacturer states. The outer layer protects the writing against smudge, grease, oil, water and most chemicals. As they are made to resist aging, sunlight and temperature, they are long lasting. The labels may be stripped off cleanly and reapplied an indefinite number of times without losing their adhesive quality. The labels are packaged in roll form in a plastic dispenser. Samples and full information will be sent on request.

## Contract Packaging

Packaging operations for producers of liquid or paste products are performed by J. L. Prescott Co. particularly for concerns marketing their products in the New York and eastern area. The company points out that its service may be helpful to concerns introducing new products or whose requirements call for more production than their present lines produce. Details about the service will be sent on request.

## Light Weight Metal Closures

Light weight metal closures with a permanently lustrous high finish that will not tarnish or lose its luster even when submerged in salt water, are made possible by a new metal, Lurim, produced in west Germany which is being introduced into the United States by the Fromson Orban Co. An American finishing plant has been engaged to process the metal for domestic fabricators. The metal may be anodized and dyed in any color to simulate gold, silver, platinum, brass or any other alloy it is stated; and it is a

work hardening alloy that is easy to fabricate. Full details about it will be sent on request.

## Cartridge Demineralizer

For the effective decontamination of water containing mixed



Permanent cartridge demineralizer

fission products a new model Penfield permanent cartridge demineralizer is offered by the Penfield Manufacturing Co. A new laboratory stand is also announced for use with it. It is designed to make mineral free water as handy as the tap. It is claimed to be capable of supplying up to 10 gal. per hour or super high purity water.

## Trade Literature

*Floral products* produced by Charabot & Cie, Grasse, France who are represented in the United States by Charabot & Co. Inc. are listed in an attractive catalog which the company has sent to the trade. Copies may be had for the asking.

*Fatty acids prepared for action from nature's chains* is the subject of a 20-page booklet issued by the Association of American Soap & Glycerine Producers Inc., 295 Madison Ave., New York 17, N.Y. The booklet is of primary interest to users of fatty acids but also serves as

a general semi-technical review for those who are not specialists in this field.

*Fatty alcohols* made by Croda Ltd. in England and sold in the U. S. through its subsidiary are listed and adequately described in a folder which has been issued by the company.

*Flavors for drinks* is the title of technical bulletin 53-1 issued by Givaudan Flavors Inc. 330 W. 42nd St. New York, 36, N. Y. The 7-page bulletin contains useful information for the manufacturer of flavored drinks. With the formulas given for complete beverage bases bottler's recommendations for use are also indicated.

*Seven classes of Atlas industrial chemicals:* sorbitol, surfactants, mannitol, solid polyester resins, fatty acids, plasticizers and activated carbons are covered in an 8-page catalog which may be had from the Atlas Powder Co., Wilmington, Del.

*A new flavor catalog* describing 19 different flavor lines and various types of vanilla concentrates has been published by Dodge & Olcott, Inc. 180 Varick St., New York, 14, N. Y.

*Rapid composition analysis of commercial stearic acids* is the subject of technical bulletin 43 issued by Emery Industries, Inc. Test procedure for determining the composition of commercial stearic and palmitic acids and necessary curves are included in the bulletin which is available on request.

*Synthetic methanol* is covered in a well compiled pamphlet issued by the Industrial Chemicals Dept., Commercial Solvents Corp. Specifications, uses, properties, toxicology, test methods, shipping, handling and storage are covered. Numerous useful tables add to its value.

*High surface sodium* is the subject of a useful booklet issued by U. S. Industrial Chemicals Co. from whom a copy may be obtained.



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# Flavor Section



## Toxicity and Flavoring Materials

*In the development and utilization of new flavorants the factor of relative toxicity must always be borne in mind*

MORRIS B. JACOBS, Ph. D.

IN my book *Synthetic Food Adjuncts* I discuss rather briefly the topic of the toxicity of flavoring materials particularly synthetic flavoring materials. It is pointed out that there are three major portals of entry for any toxic material, namely,

1. By breathing into the respiratory tract
2. By absorption through the skin
3. By ingestion with food, beverages, water, and saliva.

Accidental entry as through a cut in the skin or abrasion of the skin or through the eyes or ears is possible also.

While the most dangerous type of entry is that of inhalation, the possible injection of toxic materials has been given widespread consideration in recent years as evidenced by investigations of Congressional committees particularly the Delaney Committee, specifically the House Select Committee to Investigate the Use of Chemicals in Food Products, 82nd Congress.

The portal of entry, then, of greatest importance in a consideration of the value of a flavorant is that of ingestion. The manufacturer, however, must also concern

himself with the industrial hygiene aspects of a given flavoring material. For instance, diacetyl in minute quantities is present in butter. It is also a component of artificial butter flavors and is present in cultured butter flavors. When these flavors are added to bakery products or confectionery, or margarine, the concentration of the diacetyl in the finished product is of the order of parts per million. It is clear that in such instance the relative toxicity of this material is not of practical importance.

When, however, the artificial flavor itself is being made or the concentrated flavor is being used, then the worker must exercise care, the same care that would be exercised in the use of solvents in general.

### Acute Toxicity

The toxicity of any compound is most often considered from two points of view, namely, acute toxicity and chronic toxicity. Lehman (*Assoc. Food Drug Officials U. S. Quarterly Bull.* 16, 47 (1952)) considers another category which he terms subacute toxicity.

Acute toxicity is induced by large or relatively large doses of a substance or material. For example,

the ingestion of 15 ml. of diethylene glycol per kilograms was fatal to rats, a result which proves that diethylene glycol can cause an acute physiological response.

### Chronic Toxicity

Chronic poisoning is that attributable to harm resulting from repeated small doses. One of the instances of particular interest in the flavor field was the poisoning resulting from the repeated ingestion of a ginger extract contaminated with tri-*o*-cresyl phosphate. In animal studies, chronic toxicity experiments are generally carried on for a period of over two years.

### Subacute Toxicity

Lehman (*loc. cit.*) considers that any animal toxicity studies whose duration is less than one year must be classed as subacute.

### Concentration Effect

A very important factor that must be considered in the toxicity of any flavoring material is the fact that the concentration in the final food product is usually very small. Indeed for many synthetic compounds the final concentration is of the order of trace amounts.

In my book, mentioned above, I give as an example the final concentration of ionone in a raspberry-flavored gelatin dessert. If the raspberry flavor contains 1 per cent of ionone and this flavor was added to a gelatin dessert in the ratio of 1 part of flavor to 1000 parts of other ingredients, the concentration of the ionone in the commercial preparation would be 0.001 per

cent or 1 part in 100,000. When the gelatin dessert is prepared for use, it is diluted with 5 to 10 parts of water. This reduces the ionone in the final product to a concentration of 1 part in 500,000 or 1 part in 1,000,000. It is clear that the final concentration of the ionone is very small.

#### **Natural Substances**

When one thinks of toxicity in connection with flavoring materials one very often considers this only in connection with synthetic flavoring materials. This is an inadequate conception for many "natural" materials can cause harm. Many people are "allergic" to various foods and undoubtedly to the flavoring materials contained in these foods. To base conclusions on such "allergic" manifestations unless of a very widespread character is not an objective conclusion.

There has been comparatively little work performed on the relative toxicity of natural flavoring materials to animals. Some work has been done on determining the bactericidal effect of certain essential oils such as oil of cloves which contains the phenol, eugenol. Most of this type of work was concerned with the evaluation of such materials for use in mouth washes or for the preservation of foods rather than from the point of view of their actual toxicity.

#### **Synthetic Substances**

Despite the wide variety of synthetic materials that are used for the preparation of flavors, little investigative work has been published on their toxicity. Since there is no law which requires the certification of flavor chemicals as contrasted with the requirement for the certification of dyes used in foods, there has not been the same need for such evaluations, or should one say the same compulsion for such evaluations.

There has probably been more testing of the relative toxicity of sweetening agents than any other group of flavoring materials.

#### **Vanillin and Bourbonal**

In 1940, Deichmann and Kitzmiller reported that the minimum lethal dose for both vanillin and bourbonal (ethylvanillin) was 3.0 grams per kilogram of body weight when administered orally to rabbits. Subcutaneous injections of 2.6 grams of vanillin and 2.0 grams of bourbonal per kilogram of body weight killed 50 per cent of the rats

used as experimental animals. Death was caused by circulatory failure.

Rats fed on diets which permitted them to ingest 20 milligrams of vanillin and bourbonal per kilogram of body weight per day for a period of 126 days were not affected. Higher dosages, however, produced pathological changes of varying degrees of severity in the kidneys, liver, lungs, spleen, myocardium, and stomachs of both rabbits and rats.

#### **Coumarin**

It was pointed out by Ellinger in 1908 that coumarin in proper doses could be used as a narcotic agent for frogs and rabbits and at equivalent doses it caused vomiting in dogs. Ellinger also referred to self-experiments by Buchheim and his student Malewski on the physiological response of coumarin performed as early as 1855 which was long before the synthesis of the compound by Perkin in 1867.

Coumarin has recently been withdrawn by manufacturers of aromatic chemicals as a compound suitable for food use, an action which has met with endorsement by governmental agencies. The topic of the toxicity of coumarin and its physiological response is so broad that it was discussed in detail in last month's issue.

#### **Sweetening Agents**

As mentioned above considerable work has been done on the toxicity of sweetening agents both recently and in the past and with the introduction of a number of newer sweetening agents such as sodium cyclohexyl sulfamate (also known as sulfamate and Sucaryl) perillartine (perilla antialdoxime), Neo Douxan (1-ethoxy-2-amino-4-nitrobenzene or 2-amino-1-ethoxy-4-nitrobenzene or 2-ethoxy-3-nitroaniline) which is closely related to P 4000 (2-amino-4-nitro-1-*n*-propoxybenzene) and 2-carboxy-4-methoxy diphenyl ketone additional information is available on toxicity which I shall detail in a succeeding article.

#### **Allyl Cyclohexylpropionate**

Allyl cyclohexylpropionate is a newer flavoring agent, which has been previously mentioned and discussed in my articles on the propionates as flavoring agents and in my section on flavored notes.

Allyl cyclohexylpropionate is a colorless liquid which contributes a distinct pineapple character to a

product when used in concentrations of the order of 10 parts per million. Lehman found that 50 per cent of the rats used in oral toxicity experiments were killed by this ester when the ratio of feeding was 600 milligrams per kilogram of body weight. Subacute toxicity feeding experiments indicated that allyl cyclohexylpropionate could be fed to rats in concentrations of the order of ten times that recommended for flavoring purposes without producing injury in the animals.

#### **1-Ethoxy-2-hydroxy-4-propenylbenzene**

Some months ago I wrote about a flavoring agent which has been suggested as a partial vanillin replacement. Lehman found that the acute toxicity of 1-ethoxy-2-hydroxy-4-propenylbenzene was low and similar to that of vanillin. Thus his experiments showed that 50 per cent of the rats used in the experiments were killed when the compound was administered orally at about 2.4 grams per kilogram of body weight. His limited subacute feeding studies indicated that the rats can tolerate up to 1 per cent of the flavoring agent in the total diet for 3 months without injury. This lead him to conclude that this compound might be suitable for flavoring chocolate if the concentration did not exceed 20 parts per million. He cautioned, however, that wide use of the flavoring agent would "demand considerably more pharmacological investigation."

The field of investigation into the relative toxicity of flavoring agents and for that matter chemicals used in foods has barely been scratched. Much more work then remains to be done before conclusions of any kind can be drawn.

#### **Chicken Flavor: The Source of the Meat Flavor Component:**

Robert J. Bouthilet (Univ. of Calif., Berkeley). Food Research 16, 201-4 (1951); cf. C.A. 45, 4368f. The meaty flavor in chicken meat is due to a compd. assocd. with the meat fibers rather than the fat. It is extd. from the fibers by steeping in water or by extn. of the meat after suitable denaturation of the protein. The flavor substance has properties similar to those of glutathione. Samples of the latter have an odor similar to that of meat when dissolved in water and heated to 60°. The taste is similar to that of meat when the acid is neutralized. The relation between meat flavor and glutathione is being further investigated. Chem. Abs., Vol. 45.

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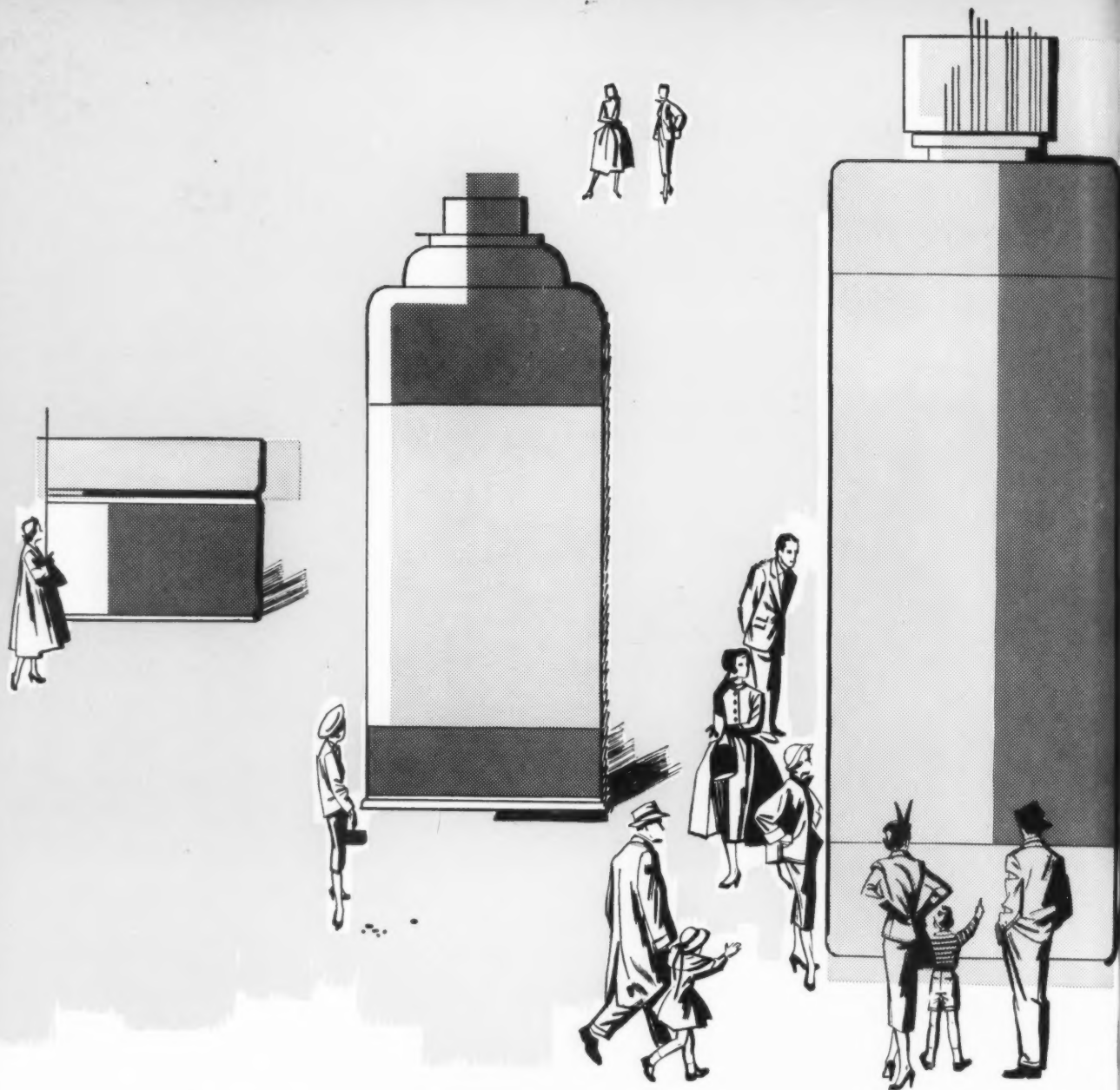
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# Essential Oils in Flavors

*Market situation of the principal essential oils used in flavors*

*. . . Standard specifications of the Essential Oil Association*

WALDO F. REIS\*



Waldo F. Reis

**D**URING the past year, practically all of the important essential oils have showed marked fluctuations in prices, and in some cases even shifts in producing areas. Generally, the tendency has been downward, with but a few exceptions. The prices of essential oils are very delicately balanced against many factors, including crops, weather, transportation and world politics as well as demand. The loss of a freighter or the contamination of one major shipment will often immediately affect the price picture of many of our most generally used essential oils.

A recent instance where an unforeseen factor has affected the market was the sudden use of lemongrass oil by the pharmaceutical industry for the production of Vitamin A and the fact that the purchases by the pharmaceutical industry were conducted in a very illogical manner. This caused an unprecedented competitive demand

\*van Ameringen-Haebler Inc. Address by president of Essential Oil Assn. before Flavoring Extract Manufacturers Assn.

for lemongrass and the price structure went entirely out of hand.

On the basis of known factors we will express our evaluation of the price situation of a few commodities with which the food and flavoring industry is most intimately concerned.

## **Cassia Oil**

Although cassia is produced in several countries of the Far East, the world's major source of this important flavoring material is China. Cassia is in extremely short supply at present. The bulk of the oil reaching the United States and Europe comes through Hong Kong where each individual shipment must be accompanied by lengthy affidavits of origin. Due to the effective blockade of China and our attendant port restrictions, cassia for all practical purposes should be regarded as unavailable. Occasionally, however, lots do find their way into our market and can be purchased locally at prices close to \$9 a pound. The outlook for cassia depends almost entirely on the political situation in the Far East, and in our judgment we cannot expect an improvement in the foreseeable future. Where the flavor of cassia is required, many imitation cassia flavors are available and many are excellent duplications.

## **Clove Oil**

The important oil of the clove bud has shown a marked advance during the past year. The price has risen from approximately \$3.50 per pound in 1951 to a high of \$11 today. The reasons behind this unusual advance are many, one being that the 1952 crop was small,

and there appears to be an unprecedented increase in the world's demand for this spice. The prospects for the immediate future do not appear very favorable, yet late source reports indicate a reasonably good crop this year.

## **Ginger Oil**

The oil extracted from ginger root seems to be maintaining a fairly level price structure, with this popular spice selling at about \$13 per pound.

## **Angelica Oil**

The market for angelica root is at present relatively easy, selling at \$90 per pound, whereas 1952 showed a high of \$120. Anticipated supplies indicate no drastic change here.

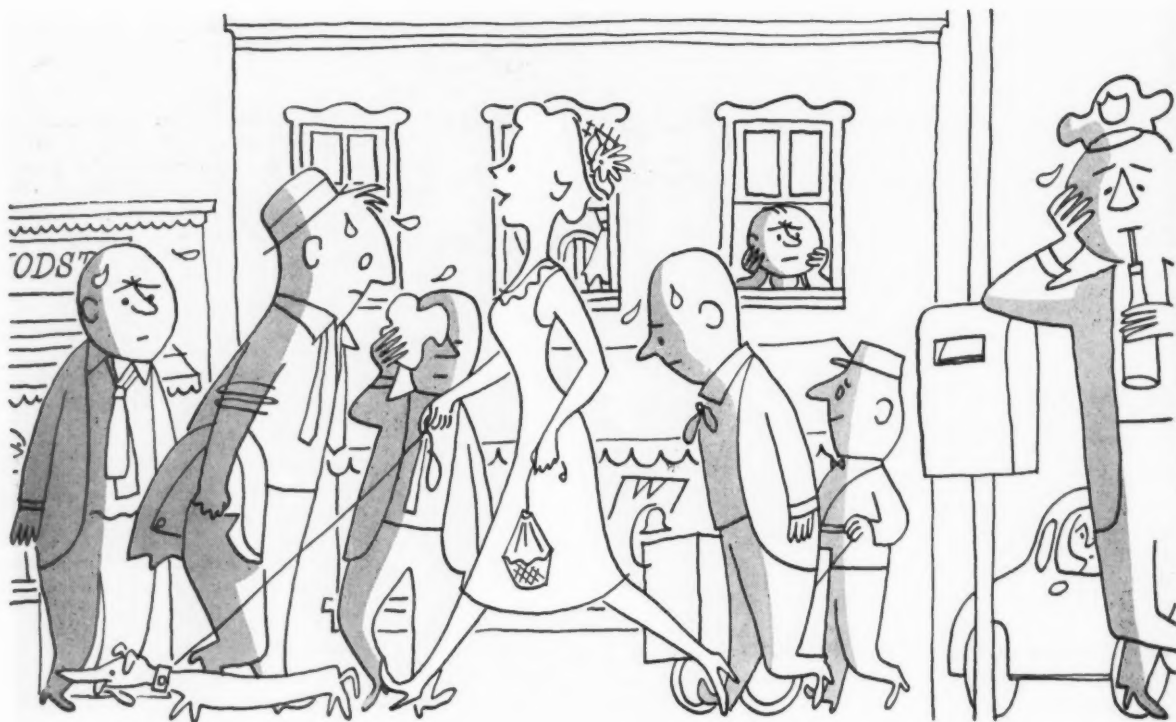
## **Lemon Oil**

Cold pressed lemon oil from California remains again in very short supply as it did all through 1952. The most important reason for this scarcity has been the fact that there was a very poor crop during 1952 and the first four months of 1953. Therefore very much less fruit has been available for processing into oil. The situation has been further aggravated by the increased demand for lemon oil. Prices today range around \$6.50 per pound with commitments subject to the supplier's ability to secure stock.

We can anticipate an improvement in the crop situation, yet we do not feel that even such good fortune would have an appreciable effect on the market in view of the heavy concentrate demand.

Lemon Oil Italian is in an equally precarious situation. All sales are based on shipments being subject to buyer's acceptance before payment is made. This necessary protection was brought about through Government action due to the inferior oils that were being sent to this country over the past few years. At the present time for a choice 4% Italian lemon the price is \$6.50 a pound, C & F, plus 17½% duty which would bring it to \$7.65 a pound, delivered New

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York. This situation, as with the domestic oil, does not look promising and should remain firm for at least the balance of this year.

#### **Orange Oil**

Orange oil cold pressed, both of Florida and California origin, is still in very ample supply. However, during the past few weeks there has been a tendency on the part of both of these oils to become somewhat firmer. The Florida oil is currently being offered at \$0.80 a pound as compared with a figure of \$0.65 a pound a few weeks ago. \$1.85 a pound. California oil is a year ago the going price was being offered at \$1.25 a pound as compared with \$1.10 a pound a few weeks ago and \$2.75 a pound this time last year. Continuing increases in orange acreage would still seem to indicate that this commodity will continue relatively easy.

#### **Lime Oil**

The market for lime oil appears to be quite stable with limes distilled down to \$6.75 a pound, a drop of about \$1.00 since the first of the year. Oil of limes expressed is quoted currently at \$9.50 per pound. No immediate reversal is expected in this commodity.

#### **Anise Oil**

Oil of anise which normally is produced in China or Indo China is subject to the same restrictions that govern the importation of cassia. At present there are only small lots of supposedly pure Chinese anise available on spot, at around \$2.50 per pound. Holland is now offering Dutch anise which could be brought in to sell for around \$1.65 a pound; however, in order to import this material the shipper must obtain an affidavit as to the oil's origin after which the buyer in turn must apply for a license to import same. Also, this Dutch anise oil is not exactly the same in quality as the standard Chinese product. This essential oil, like cassia, will undoubtedly remain critical as long as the present international situation exists.

#### **Peppermint Oil**

Oil of peppermint is in ample supply. The demand is relatively light and as a result the peppermint market has fallen from approximately \$8 a pound in March, 1952, to between \$6.25 and \$7 as currently available. The balance appears to be reasonably well stabilized at present, and we do not



Workers on a peppermint field. Oil of peppermint is in ample supply.

look for much change in this commodity.

#### **Spearmint Oil**

The market situation for spearmint oil appears to be virtually a direct opposite of that affecting peppermint oil. A particularly heavy demand for this oil at the first of the year has considerably depleted local spearmint stocks. This has caused some price increase and the oil is currently procurable at \$9 to \$9.50 a pound, varying somewhat in quality. A year ago \$8 was the going figure. We anticipate that these prices will continue for some time.

As time goes on and research on flavor materials advances, we find the flavor makers turning more and more toward the use of aromatic chemicals in their search for improved flavors. The prices of those aromatic chemicals where an essential oil serves as the starting point, as is the case with geraniol, citronellol, the ionones, etc. are of course directly governed by the corresponding price of the essential oils from which the aromatic chemicals are derived. However, the price picture of those aromatic chemicals which are produced by synthesis is the direct opposite of those derived from essential oils. New developments in the organic chemical industry may make new intermediates and primary chemicals available for the synthesis of aromatic chemicals. In many cases, our industry can use these new tools to make aromatic chemicals at a lower cost to the consumer. The development of new processes and the perfecting of old ones have more than offset the gradually increased labor costs, the ever mounting prices for new equipment, and rising overhead.

We will examine the market on

some of those aromatic chemicals which are more widely used in the flavor field.

#### **Vanillin and Eugenol Vanillin**

A year or two ago in very short supply, these materials are again amply available. The recent shortage, brought about by panic buying and coincidental production break-downs, has been eliminated, and at the present time the situation seems to have reversed itself with more than enough vanillin for all normal requirements. Lignin vanillin is presently offered at \$3 per pound and Eugenol vanillin at \$6.75 per pound.

#### **Eugenol, U.S.P.**

There has been considerable fluctuation in this important item during the past year. However, the overall result has been a gradual decline until today its price of \$2.85 per pound compares with approximately \$3.40 at this time last year.

#### **Geraniols and Ionones**

Throughout the year just passed, the various geraniols and ionones also have shown quite a price fluctuation. Derived from citronella oil and lemongrass oil respectively, these important aromatics are directly affected by any changes in the market prices of the parent oils. At the moment the supply of citronella and lemongrass oil is plentiful, which is reflected in favorable prices for geraniols and ionones.

A reasonably steady price level has maintained throughout the past year on most aromatics. There is no condition that we can foresee which would materially affect a change in the price structure of these materials within the current year.

# **GERANDALOL**

# **LAVANDALOL**



Two valuable aromatics for users of  
Geranium and Lavender oils.

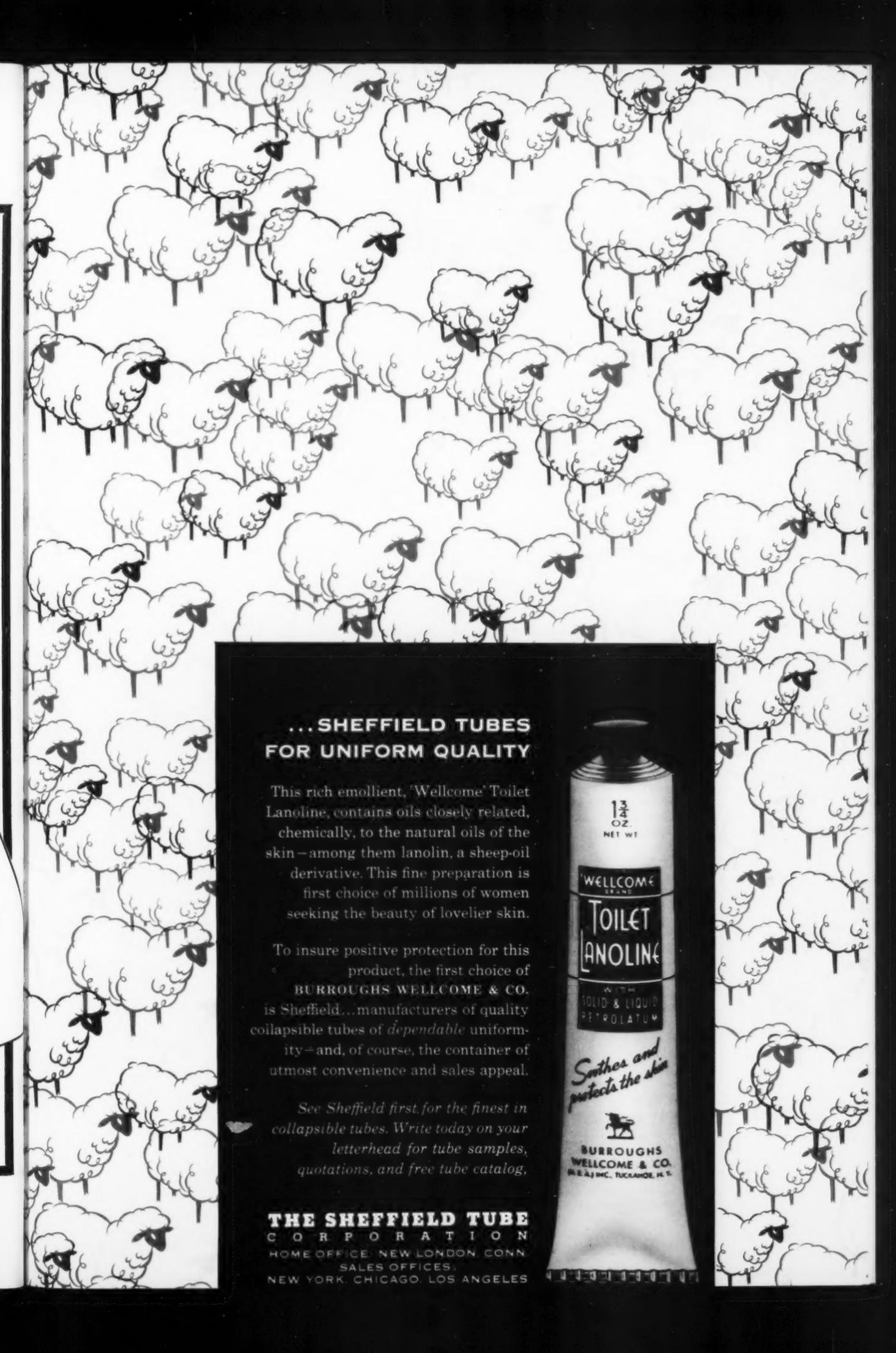
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**lasting**

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**economical**

**Schimmel & Co., Inc.**  
601 West 26th Street, New York 1, N.Y.



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This rich emollient, 'Wellcome' Toilet Lanoline, contains oils closely related, chemically, to the natural oils of the skin—among them lanolin, a sheep-oil derivative. This fine preparation is first choice of millions of women seeking the beauty of lovelier skin.

To insure positive protection for this product, the first choice of **BURROUGHS WELLCOME & CO.** is Sheffield...manufacturers of quality collapsible tubes of *dependable* uniformity—and, of course, the container of utmost convenience and sales appeal.

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# GAIR FOIL CARTONS

*create a style trend in smart Packaging!*

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**Write for Brochure on Gair Cartons**



## GAIR

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Anethole N.F. has dropped about 20¢ a pound since the turn of the year and is currently available at \$1.00 a pound in drums. Benzaldehyde N.F. is maintaining its level of 74¢ a pound, Coumarin at \$2.95 a pound, and SAFROL at about \$1.00 a pound. All seem to be in good supply.

#### New Aromatics

The research laboratories of essential oil and aromatic chemical manufacturers are continually not only developing new processes for standard products, but are also finding new aromatics which could prove to be of great interest to the flavor maker. A study of the literature references reveals an increasing interest in the rapidly growing list of chemicals which have been found naturally occurring in fruits. Through the efforts of basic organic research, micro-chemical analysis, etc. new constituents of the fruit are constantly being identified. The member firms of the Essential Oil Association can be of great help to flavor manufacturers by supplying these materials as they become identified and understood through the continuing and endless research methods used by Mother Nature, the master flavor maker. As an example, capro-aldehyde and 2-hexenal have been found in apple. Methyl N-propyl ketone, ethyl N-caproate, Methyl B-methyl thio propionate have been found as natural constituents of pineapple, and Acetyl methyl carbinol is present in grape.

These, and many other materials found to be naturally present in fruits may prove to be favorable tools in the hands of competent flavor chemists.

The Essential Oil Association has been and can continue to be of real help in assuring user a pure and dependable product.

Recognizing early the need for standardization of those materials in which the members dealt and upon which their business and reputation depended, the Association formed a Scientific Section to initiate a program whereby the essential oil users would be armed with dependable standard specifications for their products. These specifications were set up in the form of periodic bulletins with the purpose of presenting all the pertinent references required in determining quality. Today specifications are available for 68 different materials—essential oils as well as aromatic chemicals.



Snapped in the Dodge & Olcott display booth during the recent Institute of Food Technologists Convention held at the Hotel Statler, Boston, are left to right: Ken Newman, American Home Foods; Ed Wyluda, D&O Boston representative; Paul Sperry, D&O sales manager; Dr. Fabian, Michigan State College; and Ruth Farnworth, advertising manager for D&O.

As new methods of analysis for quality control are developed, such as the spectrophotometric analysis, these methods are used where applicable. The bulletins describe a product both in odor and flavor, indicate its source, and go into its botanical pedigree. The standard physical and chemical constants are described, including color, specific gravity, optical rotation, refractive index, saponification number, ester value, aldehyde content, ketone test, etc. The bulletin even considers the type of containers to be used in shipping, and proper storage conditions are suggested.

This information should be in the files of every user of essential oils and it is even more important to those who use the product in food than to the perfumer where odor alone is the essential factor. These bulletins are available to anyone at a minimum cost by addressing the Scientific Section of the Essential Oil Association, 2 Lexington Ave., New York 10, N. Y.

#### Court Rules Clear Labeling No Exemption from Formula

Clarity and truthfulness of contents labeling does not exempt a product from labeling according to the legal formula, according to a ruling by Judge Brennan, federal district court for northern New York, in an F.D.A. seizure case against the frozen dessert "Chil-Zert."

While copy on the product's carton clearly states that the dessert is not an ice cream and contains no

milk or milk fat, the required word "imitation" should have been used, according to the ruling.

The court also concurred with the F.D.A. point involving the question of imitations of non-standardized foods, such as ice-cream. The court ruled that the statutory provision as to adulteration also applies to non-standardized foods.

#### Treasury Dept. Reveals 1950 Corporation Taxes

The U. S. Treasury Department reports that 320 cosmetic corporations, filing income tax returns in 1950, showed a net income of almost \$40 million and paid \$15 million in federal income taxes and \$1.4 million in excess profits taxes. The companies paid dividends amounting to \$8.1 million. 321 cosmetic corporations, filing income tax returns, reported no net income and deficits, totalling \$2.5 million, for 1950. Dividends amounting to 8,000,000 were paid by these companies. 54 cosmetic corporations, filing income tax returns in 1950, reported net income of \$25 million and excess profits net income (adjusted) of \$9.7 million. These 54 companies paid income taxes of \$9.8 million and excess profits taxes of \$1.4 million in 1950.

**Powdered Soy Sauce.** Hideo Katagiri, et al. Japan 173,614, Sept. 4, 1946. The sauce is concd. to a sirup, mixed well with starch paste, spread on board, dried, and powdered. Diastase or malt is added. C.A. 46, 4 1667-8 (1952).

# *Either Way You Look At It*

**D&O PERFUME BASES COMBINE YOUR TWO SUCCESS ESSENTIALS**

## **TRADITION AND EXPERIENCE**

The cumulative experience of more than a century and a half of service to the fragrance products industry is the valued possession of every D&O customer. Tradition and experience are the foundation for fine and successful products.



*Authentic perfume urn of Egyptian origin. As perfume played an important part in Egyptian rituals, the double face probably held some religious significance.*

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A carefully integrated program of research and development into the manifold new and changing applications of perfume assures the D&O customer of the most up-to-date materials and processes. A progressive outlook is the opened door to enduring enterprise.



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# Hints for Improving Production

WE all know that given the same size factory, different companies will arrive at a different method of utilizing the same space. Actually, the space available to any manufacturer is not completely determined by the length, width and height of his plant but by the all important fourth dimension—utilization.

This fourth dimension is the proverbial "wall stretcher" that all plant superintendents are looking for and which makes any amount of cubic space appear to be more or less roomy.

From the conversations overheard at a recent convention, it appeared that many companies were considering either moving into a new plant, or expanding their present facilities. All companies could certainly benefit from an examination and re-evaluation of their present plant layout, for it may very well be that the sorely needed "extra" space can be found inside their present "four walls."

Good layouts come from sound space management. A good layout is one that provides the most economical method of transporting materials from the receiving room to and through the shipping room doors. Poor layouts raise the cost of production without contributing any additional value to the products a customer buys.

Good layouts depend upon proper utilization. How can you increase the percentage utilization of your plant area? First, breakdown your total plant area to determine how much of it is used for raw and finished stock storage, for work-in-process, for aisles and for your producing equipment.

The most effective measure of space management is the ratio between the floor area required for



Stock should be stored vertically, rather than horizontally.

## How to Make Space Produce Profit

the productive equipment and the total space used.

How can we increase the space available for production equipment?

Does work-in-process require a great deal of space? Management should investigate whether its scheduling is holding the work-in-process to a minimum, or if a lot of important manufacturing space is occupied by skids and material that can't be worked on for days.

Does raw or finished stock storage occupy a lot of space? Management should check to see if they are taking advantage of the cubic feet in their plant, as well as the square feet, by stacking as many of these things as possible vertically, rather than horizontally.

Do aisles require excessive space? Is it due to the fact that the plant doesn't have a place for everything (or if it does, it is not adhered to) so that space is being "stolen" to provide wide aisles because poor housekeeping keeps making the aisles smaller?

Consider whether the space required for present equipment is at

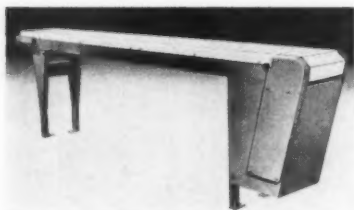
a minimum. To do this, it is necessary for management to discontinue considering the straight line as a sacred method of layout. Large reductions in operational costs and space requirement have been achieved by arranging equipment in squares, triangles, and circles. Use any combination of these which best permits operators to reduce their travel and to service multiple pieces of equipment.

Taking into account the fourth dimension—utilization—will permit you to expand your facilities, without additional building, through the conversion of non-productive space into real profit-producing areas.—Kenneth J. Eaton.

*The 1953 variety store market directory lists 19,000 companies in its 600 pages with buying reference data covering over 9,400 variety store chains and independents. Copies may be had from the Variety Store Merchandiser at \$12.50 each in the United States and Canada.*

### Metal Belt Conveyors

Metal belt conveyors offered by the M-H Standard Co. can carry loads from a few ounces up to 16 tons and power requirements are kept at a minimum by having the entire belt run on protected ball bearings according to the company.



Belt conveyor runs on ball bearings

Individual metal link construction, it is added, eliminates belt tracking problems. The belts are available in inclined or vertical models for floor to floor conveying.

### Safe, Low Cost Radioisotopes

Radioactive tracers which make possible the investigation of chemical, physical and biological processes which can hardly be studied as well—and in some cases, at all—in any other way are available in the form of safe, inexpensive, radioisotopes, bottled and sold over the counter and by mail. Users need no Atomic Energy Commission authorization, no formal training and no elaborate safety precautions. Already 25 different radioactive compounds are offered by Fisher Scientific Co. The radioactive reagents are sold in microcuries—a thousandth of a millicurie; hence no AEC authorization is needed by the user. Each reagent comes in a small screw capped glass vial whose walls absorb all the radiation of the contents. According to the company the total radiation per vial of radioactive reagent:

one microcurie (37,000 disintegrations per second) a useful yet safe activity contained in 14 ten-thousandths of an ounce (40 milligrams) of chemically pure compound like benzoic acid or sucrose or urea. The scientist may select the compound he wishes to use and it comes tagged with the radioactive atoms. The vials, it is stated, can be packed together in large numbers without fear of radiation hazard. Vials are sold for \$15. Further information will be sent on request.

### Low Cost Floor Truck

A new heavy duty floor truck is offered by the All Steel Welded Truck Co. at a moderate cost. Purchasers may choose between tilt



Heavy duty floor truck

and nontilt types; between steel, rubber, composition, oil-resistant and static-conductive wheels and various types of bearings.

### Processing Literature

*Masking agents for dip silver* polishes to cover the unpleasant odor resulting from the contact of silverware and phosphoric acid, are announced by Dodge & Olcott Inc., 180 Varick St., New York, 14, N. Y. The agents are available in a number of popular fragrances.

A directory of Owens-Illinois Glass Co. Products describing and illustrating representative non-glass and glass products of the company's various operating units has been published in the form of an attractive color illustrated brochure which may be had by writing to the company in Toledo 1, Ohio.

The guide to the use of the mails published by the Direct Mail Envelope Co. contains useful information such as how to make profitable use of special reduced mailing rates, how to correct mailing lists, parcel post and insurance rates, etc. In the 28 page illustrated booklet compiled by Henry A. Berg, there is a quick reference summary of current postal rates. Copies are available for the asking.

*Who's Who in Commerce and Industry* containing 1100 pages with over 26,000 listings carefully selected against detailed standards has been issued in its eighth edition by the A. N. Marquis Co. In addition to biographical data it has an indexed catalog of selected principal businesses. It lists concerns and indexes them to the career sketches of their ranking executives. The volume takes care of every day in every business questions that hitherto could not be answered quickly. The retail price is \$17.75.

*Typical projects and problems of industrial construction* is an illustrated brochure published by Robert E. Lamb & Son, industrial builders, for companies that are finding it necessary to re-align their production and their development construction programs to meet increasingly competitive peace time conditions. Copies will be sent on request.

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## 415—ABSOLUTE JASMINE—E

A true simulation of absolute Jasmin Extraction. To be used to replace the absolute outright or in conjunction with the absolute.

**\$25.00 per lb.**

**ALBERT VERLEY & COMPANY, INC.**  
114-116 East 35th St., New York 10, N. Y.

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## 416—CHATENILLE B. M. EXTRA (Spice-Aldehyde Type)

A new modern fragrance, especially designed for Colognes and Toilet Waters.

**Price per pound \$17.50**

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**POLAK'S FRUTAL WORKS, INC.**  
Middletown, New York

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## 417—CIVOL STANDARD NOVILLE

Compares favorably with a 10% infusion of Civet Absolute. Gives life to the jasmin component of fine floral bouquets. Reasonably priced at

**\$8.80 per pound**

**NOVILLE ESSENTIAL OIL CO.**  
1312 Fifth St., North Bergen, N. J.

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## Technical Abstracts

**Determination of Resorcinol in Hair Dyes.** S. H. Newburger and J. H. Jones (Food & Drug Admin., Washington, D.C.). J. Assoc. Offic. Agr. Chemists 34, 787-92 (1951). A method is described in which the resorcinol is extd. by Shupe's procedure (C.A. 36, 621) and identified and detd. quantitatively by ultraviolet spectrophotometry. The measurement is made in 0.1 N HCl at 273 mμ. The av. recovery of resorcinol added to various hair dyes was 96% (7 detns.), the greatest deviations being +3% and -2%. Chem. Abs. 46, 7, 3215.

**Soluble, Aromatic Coffee Extract Powder.** J. H. Schaeppi and Walter Mosimann. Swiss 272,240, Dec. 15, 1950. Roasted coffee is extd. with a soln. of Ca (OH)<sub>2</sub> at 100°. To the ext. is added gum arabic and lactose. The pH is adjusted to 5 with tartaric acid, and the mixt. is evapd. in vacuo. The aroma of roasted coffee is preserved in the product. Chem. Abs. 47, 1, 232, 1953.

**Lipsticks.** K. Rothemann. Parfümerie u. Kosmetik 30, 176-82 (1949) Chem Zentr. 1950, I, 2296. The various ingredients which may be used in lipsticks are discussed. The dye should not amt. to more than 30% of the base. Chem. Abs. 46, 21, 10532 & 10533, 1952.

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## 418—DIANTHUS CARIOSA NOVILLE

Carnation?—Yes, and of a deep rich fragrance rarely found at this price. It lasts and lasts—something to remember when working on powder perfumes.

**\$9.80 per pound**

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## 419—FIXATEUR LIQUID NA

A unique fixative for any type of perfume, cologne, cosmetic, or powder. The use of from 10 to 20% greatly improves the lasting qualities of most perfume compounds.

**1 lb. \$8.00—2 oz. Sample \$1.25**

**NAUGATUCK AROMATICS**  
254 Fourth Avenue, New York 10, N. Y.

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## 420—HUNTER 40-R-4398

A New perfume compound, specifically designed for scenting men's toiletries. Give that fresh, woodsy, aldehyde fragrance, so popular in shaving creams, lotions and men's hair preparations.

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**Amazing, economical odor value**  
Jascent gives you amazing odor value at an incredibly low price. This fine Jasmin type is perfect for your cosmetics, colognes, shampoos, liquid soaps, detergents and air sprays. It has exceptional lasting properties. Why not order a trial quantity!

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A faithful reproduction of Natural Tonquin Musk. A solution of 2 ozs. to 1 gallon successfully replaces the natural tincture 4 ozs. to 1 gallon.

\$50.00 per lb.

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### 423—PINAPEROL

A single chemical possessing the freshness of Pineapple. It is used in flavors but finds an increasing place in perfumes for its delightful top note. Try 1 or 2% in your Lily, Muguet or other floral compounds.

\$1.50 per ounce

VERONA CHEMICAL COMPANY  
26 Verona Avenue, Newark, N. J.

**Hair Bleach.** Union francaise commerciale et industrielle. Fr. 946,665, June 10, 1949.  $H_2O_2$  or a water-sol. persulfate is added to a fat emulsion, and preferably small amts. of cholesterol, vitamin F. and lecithin are added. Chem. Abs. 45, 8, 3570, 1951.

**Dental Cleaner.** Theodore R. Rhein. Fr. 943,987, Mar. 23, 1949. Discoloration and deposits on teeth are removed by an aq. soln. contg. 3% monoethanolamine and 10% triethanolamine lactate (pH 9.5). Chem. Abs. 45, 8, 3570, 1951.

**Cosmetic Aspects of Hair Chemistry.** J. L. Stoves. Mfg. Chemist 22, 287-91 (1951) cf. C.A., 46,5791c. The chem. effects on keratofibers of hot  $H_2O$  or steam and of reducing agents are reviewed in relation to the changes occurring during the permanent waving of hair. The actions of alkalies and of  $H_2O_2$  on human hair are also considered. Presence of Cu in the fiber gives rise to 4 times and of Ni or Co to 1.75 times the oxidative damage caused by uncatalyzed  $H_2O_2$ . Chem. Abs. 46, 20, 9805, 1952.

**Tooth Paste and Oral Disinfectant.** Albino Jenko. Austrian 172,063, Aug. 11, 1952. Alc. ests of propolis resin, as described in Austrian 167,862 (cf. following abstr.) are mixed with the usual ingredients of tooth pastes, gargles, etc. The antiseptic properties of such preps. are thereby improved. Chem. Abs. 46, 20, 9810, 1952.

### 424—PROTOVANOL "C"

Florasynt's amazingly effective replacement for Coumarin to meet the needs of the flavor industry.

1 lb. Trial order at the 25 pound price  
\$5.00 a lb.

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### 425—RESEDALIA

An acetal of great value to the perfumer. A small amount added to floral compositions produces dramatic effects.

\$1.25 per ounce

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### 426—ROSCENT

#### Floral Rose Geranium Fragrance

Here is a new, interesting and extremely economical Rose Fragrance. Its delightfully refreshing odor will add sales appeal to all of your cosmetics and toiletries. A trial order will convince you!

2 oz. sample \$1.00—1 lb. \$5.00

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## 428—SORBITOL

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17¢ lb. in drum quantities f.o.b. plant  
**ATLAS POWDER COMPANY**  
Industrial Chemicals Dept., Wilmington 99, Del.

**Permanent Hair-Waving.** Union française commercial et industrielle. Fr. 944,525, Apr. 7, 1949. The hair is moistened with a soln. of (1) EtOH 88 45° Be., sodium alkylnaphthalene 2, and NH<sub>4</sub>OH 10 g. 22° Be. or (2) Na<sub>2</sub>SO<sub>3</sub> 5, Na lauryl-sulfate 2, NH<sub>4</sub> 10 g. 22° Be., water to 100 g., the hair for a distance of 4 cm. from the root being left dry. The hair is then placed in rolls or waves and the usual cold permanent-wave technique followed. Chem. Abs. 45, 8, 3569, 1951.

## 427—SODIUM LAURYL SULFATE USP Extra

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417	420	423	426	

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## Winterizing Feet

COLDS, America's most common scourge, could be lessened by half, with proper foot care during winter months, says Dr. Joseph Lelyveld, chairman of the National Foot Health Council. This means not only cutting down absenteeism, saving medication costs—but avoidance of many cases of pneumonia and other serious ailments. "A large percentage of colds incurred in winter months result from improper foot care," says Dr. Lelyveld. "Over-protection of the feet is as bad as inadequate care." Improper use of overshoes and rubbers is an example. Among the rules for winterizing feet are: keep your feet warm—but make sure they can "breathe." Don't wear shoes or stockings that restrict free toe movement. After exposure to bad weather, exercise your feet to stimulate circulation.

## Chop It Off

LARGE chemical process companies are usually not adverse to mergers and acquisitions, but somehow are very reluctant to get rid of business which is of no particular help to them. However, in instances where a company cannot devote the time necessary to properly manage a subsidiary operation, or in those cases where even the fullest development of the potential of one product or line will not return as much as if such efforts had been devoted to other business, it is advisable to abandon the enterprise.

The Celanese Corp. and the Heyden Chemical Co. are good examples of firms which have divested themselves of subsidiary ventures. Phillips Petroleum sold its eastern LPG distribution set-up to Suburban Propane Gas Corp. Eastman-Kodak sold the vacuum equipment department of Distillation Products Industries to the Consolidated Engineering Corp. The latter hopes to increase sales of such equipment 3.5 times during the next five years. Similar moves are noticeable in other industries.

The thing to remember is that if a secondary operation does not permit a company to concentrate on its important lines—chop it off.—R. S. Aries & Associates.

## No State Fair Trade Laws Repealed

VIGILANCE for fair trade is urgent at the state level in 1953 cautions the Bureau of Education on Fair Trade. With 44 state legislatures slated to convene next year, the keynote for friends of fair trade is active vigilance against repeal threats. It is an impressive fact that no state fair trade law has ever been repealed since the inception of fair trade in 1931. If apathy and inertia among the supporters of fair trade were to permit its enemies to break through at any point in any state, the consequence might well be an avalanche of repeal efforts that could greatly weaken, if not destroy, fair trade.

The opposition has organized for the first time to fight fair trade on all fronts. A newly-formed "National Independent Supermarket Committee" has announced its intention to seek repeal of state and federal fair trade laws, through a nation-wide public campaign.



## Use of Plasticizers for Soap

*Specialized plasticizers when incorporated into soap can improve the general appearance of the tablets and reduce the tendency of certain soaps to crumble*

PAUL I. SMITH

IT is, perhaps, rather unusual to consider the use of plasticizers for soap as these substances are more generally employed for modifying the properties of paper, textiles, leather, cork, plastics, casein, gelatine and adhesives. On the other hand certain specialized plasticizers, when incorporated into soaps, can improve the general appearance of tablets, reduce the tendency of certain soaps to crumble and also assist as carrying agents for water soluble dyes.

Some plasticizers, such as sodium abietate are valuable emulsifying agents and are, therefore, of value for dry cleaning and other special soap lines. As a class the polyhydric alcohols are the most interesting and useful soap plasticizers and often preferable to glycerine, e.g. sorbitol or hexahydric alcohol is less hygroscopic in moist air and retains its moisture longer than glycerine in dry air. Thus when utilized in soap to be shipped to hot climates, changes in soap structure are much less marked than when glycerine is used.

The requirements of a satisfactory plasticizer for soap may be listed as follows:

1. Its colour should be water white or at least straw-coloured.
2. Its form should preferably be liquid as this is the easiest to use.
3. The odour of the plasticizer must be pleasant, but slight.
4. It needs to be completely non-toxic and non-irritant.
5. Solubility in water should be good and at least partial in alcohol, glycol and glycerine.
6. The pH should be 7-8 i.e. using a 20 per cent aqueous solution at 25 deg. C.
7. A small percentage of plasticizer, i.e. about 2 per cent, should be able to influence the properties of the finished soap, e.g. by means of its high lubricating properties the addition of plasticizer can enable a higher polish to be given to tablet soap.
8. Hygroscopicity should be low and the plasticizer should not be sticky.

### Stability of Soap Perfumes

IT is true to say that data on stability and discolouration can be very misleading unless it is inter-

preted with great care. The following facts should, therefore, always be taken into consideration:

1. Aromatic chemicals are seldom used alone and mixtures or blends do not act in the same way as individual compounds, indeed, some ingredients increase the instability of other substances. To determine the stability of mixtures, tests should be carried out on them and no firm conclusions drawn from information relating to the ingredients.

2. Another factor influencing stability and susceptibility to colour deterioration is the pH of the soap. Changes in alkalinity may have a serious effect on the perfume additive and it is, therefore, of great importance to standardize manufacture so that the pH values of soap batches to be perfumed do not vary within half a degree.

Sometimes quite unexpected trouble in perfuming soap can be traced to changes in formulation and the addition to the mix of colouring agents, emollients, anti-oxidants, etc. Standardization of manufacture is the only true safeguard of soap stability.

### John G. McNary Feted for 50 Years' Service with Colgate

John G. McNary, who rose from office boy to district sales manager during a half century with Colgate-Palmolive-Peet Co., was honored by the company and his associates at a recent 50th anniversary party in "21" Club, New York.

E. H. Little, board chairman and chief executive officer of Colgate, presented him with an engraved gold watch.



## The proof of the product is in the USAGE!

More than 80% of all lemon oil used in the U. S. is EXCHANGE Brand! An amazing endorsement!

The reasons are simple. Only carefully selected lemons from the groves of sunny California are used to make EXCHANGE Oil of Lemon. This fine fruit, plus skillful processing, gives you lemon oil with superior flavor, consistent aroma and clarity with no cloud or sediment.

For complete satisfaction, just specify EXCHANGE Oil of Lemon when you order.

Dodge & Olcott, Inc., 180 Varick St., New York 14, N.Y.  
Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N.Y.  
*Distributed in the U.S. exclusively by*

### Sunkist Growers

Products Dept., Ontario, California

Produced by  
Exchange Lemon Products Co.  
Corona, California





## NEWS and EVENTS

### New Jersey Court: Interstate Trade Not Bound by F.T. Law

Retailers engaged in interstate commerce of non-essential goods can't be forced to abide by a manufacturer's fair trade price schedule under the New Jersey Fair Trade Act, unless a contract or agreement has been made with him, according to a ruling by state superior court judge Walter J. Freund. The court refused to grant Lionel Corp., Irvington, N.J., an injunction against S. Klein of Newark's selling its toy electric trains below fair trade price.

The judge cited a U.S. Supreme Court decision of May, 1951, that price fixing is only valid through contracts or agreements, and ruled that the New Jersey law did not apply to parties engaged in interstate commerce.

### Houbigant's Salesmen Lauded at Annual Meeting

Pierre Harang, vice-president of Houbigant, congratulated the members of the firm's sales organization on their performance during the recent annual sales meeting at Ponte Vedra Club, Ponte Vedra Beach, Fla. Attending were executives and sales representatives from the United States, Canada, and Puerto Rico.

"Bert" Georgi, sales manager, di-

rected the sessions devoted to merchandising and presented the new Fall and Christmas lines. He also unveiled an entirely new display idea.

Al Welzel, promotion manager, discussed new advertising and promotional plans.

### 32nd Lavender Sample Fair September 3-6 in France

The 32nd Lavender Sample Fair will take place in Digne (Basses-Alpes), France, September 3-6, according to the commercial attache to the French Embassy in New York.

A large number of exhibitors will participate, it is noted, and the batches offered by producers will be analyzed by the management of the Lavender Fair.

Further information may be obtained from Comite de la Foire Exposition de la Lavande, Maison de la Mutualite Agricole, Boulevard Victor-Hugo, Digne, (Basses-Alpes), France.

### American Chemical Society's Chicago Section Convention

The Eighth National Chemical Exposition by the Chicago section of the American Chemical Society has been scheduled for October 12-15, 1954, in the Chicago Coliseum.



Rene E. Bernard, director of research of Lenthier, Inc., addresses the annual sales convention of the company at the Savoy-Plaza Hotel in New York. Mr. Bernard was honored during the convention for his 25 years of service with Lenthier.



John G. McNary, Colgate New York district sales manager, receives a gold watch from board chairman E. H. Little at his 50th anniversary with the company.

Houbigant executives and sales representatives from the United States, Canada and Puerto Rico at Ponte Vedra, Fla., at recent sales meeting.



# let perry brothers solve your perfume problems!



**Soaps, creams, cosmetics  
and toilet preparations  
need scent appeal to make  
them a sales success.**

In the laboratories of Perry Brothers are available, and at your disposal a fabulous collection of perfume materials plus the imagination and skill of their master perfumers to create fragrances that will enhance your products and increase their sales appeal.

Describe your problem in detail and we will send you the perfume best suited for your preparation, without obligation, of course.

*Let us send you samples best  
suited for your specific needs.*

**PERRY PERFUMES PERFECT YOUR PRODUCTS!**

## PERRY BROS., INC.

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Supreme  
Perfume Oils

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Line

Soleauromes  
(Solub-Oils)

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for Lipsticks

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Aromatics

Dr. Alexander Katz Co.

division of  
**F. RITTER & CO.**

Los Angeles 39, California

Branch Offices in Principal Cities

**THIS TINY  
PERFUME FUNNEL...**

**and  
THIS TINY  
POWDER SCOOP.....**

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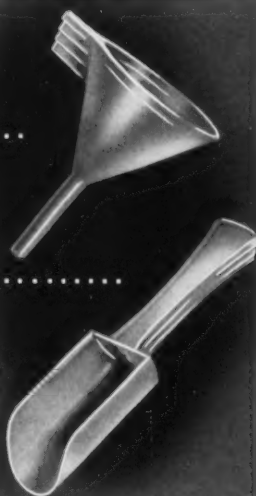
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Samples and Prices.

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MADE OF  
UNBREAKABLE  
POLYETHYLENE



Richard D. Webb

### Richard D. Webb Elected Secretary of W. J. Bush & Co.

Richard D. Webb, son of R. Righton Webb, well known general manager of W. J. Bush & Co., New York, has been elected secretary of the company. He is the first great grandson of the founder, William John Bush, to become an officer in the world wide organization of W. J. Bush & Co.

Young Mr. Webb was graduated from Duke University with the degree of Bachelor of Arts in 1951. During his summer vacations while attending college he worked in the Linden, N. J. plant of the company learning the business from a technical angle; after graduation he joined the New York office as assistant to his father. In 1952 he became sales manager, and recently the directors elected him to the position of secretary.

It will be remembered that Mr. Webb has distinguished himself as an exhibitor in horse shows. A host of friends within and outside the industry will be delighted to learn of the success Dick is achieving in the essential oil industry.

### Tussy Cosmetics Completes Six-Day Sales Convention

Tussy Cosmetics held a sales convention at the Hotel Madison, New York City, from July 6 through 11, conducted by Paul Carey, general manager. Edward Plaut, president of Lehn & Fink Products Corp., made the keynote address. Guest speakers included: Alice Thompson, editor and publisher, *Seventeen Magazine*; Julian Bach, editor-in-chief, *Today's Woman*; Helen Otis, executive editor, *Woman's Home Companion*; Louise Paine Benjamin, contributing editor, *Ladies' Home Journal*.

In attendance from New York were: Mr. Plaut, Paul Carey, treasurer A. R. M. Boyle, sales manager Gerry Cannon; assistant sales man-

agers Lee Smith and Don Stillman; field sales manager Ralph Kleinschmidt; director of promotion and product development Teresa M. Hinz; packaging director Gloria Van Fleet; educational director Marie Copleston; advertising manager William Hausberg; publicity director Ruth Ann Bolway; Dr. Emil G. Klarmann, vice president and manager technical services; Florence Goldin, Ed Richer, Ed Weiss, Charles Rollins, Estelle McBride, Grey Advertising Agency.

The following includes the sales representatives, junior sales representatives and special representatives: Al Nelson; Charles Graham; Harold Cutting; Harry Tierney; Bill Turnage; Loretta Marshall; Frances Colmar; Penny Cavanaugh; George Hughes; Al Bergstrom; John Turcotte; Maury Higgins; Illin Butler; Ethel Johnson; Kay O'Dell; Hoyt Thomson; Len Weiss; Pete Morris; Herb Nash; Lorraine Robin; Vera Haling; Stella Smythe; Cora Colbert; Martha Foster; Arthur Roberts; Joe Robinson; Normand Godbout; Vic Fredholm; Jim Vanlandingham; George Kelleher; Eve Comstock; Olive Boyd.

### F.T.C. Drops Wildroot Advertising Allowance Case

The F.T.C. has dropped a complaint charging Wildroot Co., Buffalo, N.Y., with discrimination in offering advertising allowances to druggists who promoted its hair preparations.

According to the new chairman, Edward F. Howrey, the complaint had been dropped because the firm had abandoned the practice and had agreed to abide by the toilet goods trade practices code. He claimed a reversal of an old policy against settlement of such cases.

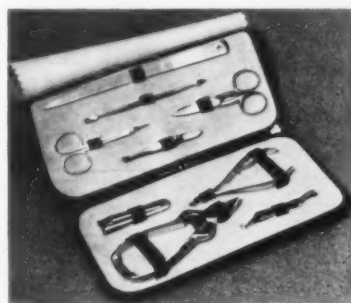
### Colgate Honors Charles Vint for 50 Years' Service

Charles R. Vint, president of Colgate-Palmolive-Peet Co., Ltd., Toronto, Canada, was the guest of honor at a recent anniversary reception in Toronto to celebrate his 50 years of continuous service with the Colgate organization. Mr. Vint helped to organize Colgate-Palmolive-Peet Co., Ltd., 40 years ago.

Executives present from the parent company, Colgate-Palmolive-Peet Co., Jersey City, N.J., included E. H. Little, board chairman and chief executive, and Joseph H. McConnel, president; as well as William L. Sims II, president of Colgate-Palmolive International.

### World's Costliest Manicure Set to Retail for \$59.50

Schneffel Bros. Corp., manufacturers of La Cross manicure instruments, are introducing what they



La Cross \$59.50 manicure set

claim to be the world's costliest manicure set.

Retailing at \$59.50, it contains nine instruments in 24 carat gold plate, in an alligator leather case with a golden plate on the outside for the owner's initials. The set is called the "Golden Era" to commemorate the firm's 50th anniversary.



Albert Bellefontaine (left), first president of the Canadian Toilet Goods Mfrs. Assn., and John R. Kennedy, first president from the western division of the association, after having lit the 25 candles on the birthday cake at the association's silver anniversary convention.

# American Aromatics

*Essential Oils*

*Aromatic Chemicals*

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FOR FINER COLD WAVE  
FORMULATIONS**

## AMMONIUM THIOGLYCOLATE

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McNerney Chemical Corp., Los Angeles 23, Cal.  
V. & S. March, 6346 MacDonald Ave., Montreal 29, Que.

# B-W LANOLIN U.S.P.

**EVENTUALLY—For better creams, with economy**

B-W Lanolin the superior quality puts into your cream that which gives the skin that smooth soft velvety feeling.

B-W Lanolin will never cause your cream to darken, is best by test and contains over 15% free and combined Cholesterol.

No other base used in your cream, equals the merits of B-W Lanolin.

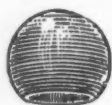
B-W HYDROPHIL (Absorption Base) Made in U.S.A.

## BOPE-WHITTAM CORPORATION

Executive Office, Laboratory  
and Factory: Linden, N.J.

America's Original Lanolin Producer  
ESTABLISHED 1914

Sales Office: 509 Fifth Ave.  
New York, N.Y.



**CONSOLIDATED**

**Established 1858 FRUIT JAR CO.**  
NEW BRUNSWICK, NEW JERSEY

SHEET METAL GOODS : SPOUTS : SPRINKLER TOPS : DOSE CAPS

## Aromatic Chemicals FOR PERFUMERY AND FLAVORS

- Iso Propyl Quinoline • Isobutyl Quinoline
- Ethyl Anthranilate • Butyl Anthranilate
- Skatol
- Linalyl Anthranilate • Linalyl Isobutyrate

**FAIRMOUNT**  
CHEMICAL CO., INC.

600 Ferry Street Newark 5, N. J.

### Parfums Weil Returns to The American Market

Parfums Weil has returned to the American market with the appointment of Gaston de Havenon, president of Ann Haviland, as its exclusive agent in this country.

Offices are located at 1 West 52nd St., New York. Deliveries will start in September.



Gaston de Havenon

The line embraces perfume, toilet water, and bath oil, the latter called Secret of Venus. Scents are named Zibeline, Cassandra and Antilope.

All products will be packed and sealed in Paris.

### St. Louis Drug, Chemical and Allied Trades Assn. Officers

The Drug, Chemical and Allied Trades Assn. of St. Louis has elected the following officers for the coming year: president, Fred L. Thieleman, McKesson & Robbins, Inc.; 1st vice-president, H. A. Eckhart, Miles Labs., Inc.; 2nd vice-president, Louis J. Kirchhoff, J. B. Williams Co.; secretary and treasurer, Fred J. Lence, Abbott Labs., Inc. The office of chairman of the board is vacant due to the death of permanent chairman, Richard T. Dunn, founder of the organization.

### Proposes Ad, Research Reserves for Corporations

A brief for a proposed law which would allow corporations to set aside reserves for advertising and research is being prepared by J. K. Lasser, noted tax expert.

### Owens-Illinois Glass Co. Starts Research Center

Owens-Illinois Glass Co. has announced that it is starting construction of a new Technical Center in Toledo, Ohio, that will consolidate the company's general research program with the engineer-

ing activities of its various divisions, aimed at developing new methods of making and using glass, while improving present products and processes.

Work will start immediately on the new center, which will occupy a 270 ft. by 480 ft. area in the western section of the city. It is scheduled for completion in the fall of 1954. A pilot plant, now located on the site, will be incorporated into the new building.

### Tonette Home Permanent Accepted by A.M.A.

Tonette Home Permanent, a product of the Toni division of the Gillette Co., has been awarded the seal of acceptance by the American Medical Assn. Committee on Cosmetics.

### Guerlain Offers Prizes in Seventeen's Benefit Contest

Guerlain, Inc. has donated six bottles of "Shalimar" perfume as prizes in the annual *Seventeen* magazine and Save the Children Federation Doll Contest.

The perfume, along with other prizes, will be featured in forthcoming issues of the magazine. The dolls, which will be judged, will be distributed to needy children here and abroad.

### Among Our Friends

C. W. MITCHELL has been appointed executive vice-president of



C. W. Mitchell

Nyotex Chemical Co., a mutually owned subsidiary of Consolidated Chemical Industries, Inc., Stauffer Chemical Co., and Harshaw Chemical Co.

JACQUELINE COCHRAN tells how she flew a jet plane faster than sound, the first woman to have done so, in an article in a recent issue of *The American Weekly*.

DR. EMIL G. KLARMANN has been appointed vice-president in charge of technical services for the Lehn & Fink Products Corp. professional products department. He has been chief chemist and vice-president of the concern for more than 25 years.

R. H. MULFORD, Owens-Illinois Glass Co. vice-president, has



R. H. Mulford

been elected vice-president and general manager of Kimble Glass Co., a subsidiary.

GEORGE UHE, president of the company that bears his name, recently returned from eight weeks abroad. He advises that the economy of Western Germany continues upwards. While pharmaceutical and chemical business is slightly lower this year, synthetic resin and yarn manufacturers report tremendous strides. The insecticide chemical field has also expanded. France, in spite of its political difficulties, continues to eat well, he reports. There were only sixteen working days in May, he observes. The retail perfume business continues to boom due to influx of visitors not only from the U.S., but from many other countries as well. Grasse reports that the demand for natural perfume raw materials is greater than ever. Holland is industrious as always, he noticed, depending upon her export and import trading astuteness to do business all over the world. Prices in Switzerland remain high, he found, though the country remains enjoyable.

JACK BRODERICK, formerly with S. B. Penick & Co., has now joined L. A. Champon & Co.

R. G. WILSON, sales manager of Beauty Industries, Ltd., Hamilton, Ont., Canada, has been elected secretary of the National Sales Executives of Hamilton.

# MODULAN

**MODULAN** is a chemically treated lanolin containing all the constituents of lanolin deliberately modified by a unique treatment to introduce new and valuable properties.

It represents a radical departure from lanolin in structure, function and odor, and more closely approximates the normal human skin fat.

Investigations now being conducted indicate that **MODULAN** is hypo-allergenic.

**SOLUBILITY**— Because of induced chemical differences in molecular structure, **MODULAN** is far more hydrophobic than lanolin and forms clear solutions in mineral oil.

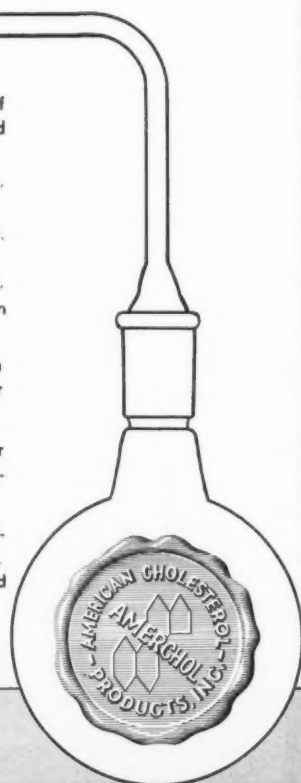
**TEXTURE**— **MODULAN** solutions leave water-resistant protective films which are inherently softening and prevent defatting. These films are waxy rather than tacky and are very agreeable to the touch.

**COMPATIBILITY**— Because of its outstanding compatibility with oil-in-water emulsions and with soaps and shampoos, **MODULAN** can be used in high concentrations without affecting stability and foaming.

In addition to the above mentioned advantages, **MODULAN** deposits an emollient, protective film and is therefore highly effective in baby oils, hair dressings, soaps, shampoos, oil-in-water creams and lotions, lipstick, and other cosmetic and pharmaceutical products.

Detailed information available on request.

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INCORPORATED  
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*glamorize your products with*  
**PANTONE MERCHANDISE DISPLAYS**

*Art, copy, color matching,  
printing done by specialists  
assures maximum sales results.*

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*Beeswax*

Experimental data and practical manufacturing experience of nearly 100 years' specialization in beeswax and beeswax compounds are at your service without cost or obligation. Write about your beeswax problems to **WILL & BAUMER CANDLE CO., INC., Syracuse, N. Y. Est. 1855**

Spermaceti—Ceresine—Red Oil—Yellow Beeswax—Composition Waxes—Stearic Acid—Hydistear

Mr. and MRS. LOUIS FACTOR, MR. and MRS. MAURICE R. CHEZ, with their son and twin daughters, and MR. and MRS. DAVIS FACTOR with their son DAVID visited Hawaii last month. Davis Factor is board chairman and Louis Factor is treasurer of Max Factor & Co.; Maurice R. Chez is president of Sales Builders, Inc., Factor distributors.

ALFRED E. BROWN has been appointed vice-president of Harris Research Labs. He also remains assistant director of research.

RAY HAMILTON has been appointed Mid-West sales representative for the Christian Dior Perfumes Corp.

NEIL O'CONNOR, formerly with Harriet Hubbard Ayer, has been appointed by Dermetics to cover the Ohio territory.

ELIOT FRIBERG, West Coast division manager for Florasynth Labs., Inc., has concluded an extensive trip to the East Coast. He visited the new New York plant,

and discussed with executives there and at the firm's Chicago headquarters. He also attended the Institute of Food Technologists



Eliot Friberg

annual meeting and convention in Boston.

PRINCE and PRINCESS ARCHIL GOURIELLI (Helena Rubinstein) acted as judges for the Miss Europe contest during their visit to the island of Capri. They also attended the opening of the Helena Rubinstein sponsored art show, "Twenty Imaginary Views of the American Scene by Twenty Young Italian Artists."

## Obituary

### James A. Reilly

James A. Reilly, 49, director and executive vice-president of the Colgate-Palmolive-Peet Co., Jersey City, N.J., has succumbed to a heart attack.

### Wendell Keith Van Slyke

Wendell Keith Van Slyke, 43, assistant vice-president in charge of production for Campana Corp., Batavia, Ill., died suddenly July 22.

Surviving are his widow, Marguerite Gates Van Slyke, and two daughters, Roxanne and Carla.

### Grady Dupree

Grady Dupree, 59, Coty district manager for the South-East, died suddenly on July 17.

A registered pharmacist, he came to Coty in 1929 as a salesman, and in March 1949 was appointed district manager.

Funeral services were held in his hometown, Birmingham, Alabama. His wife, Anna Mae Dupree, survives.

*molded bottle closures*  
Large selection of designs in a variety of colors and sizes.

*molded jar closures*  
In a diversity of colors, styles and sizes including standard 33, 38, 43, 45, 48, 53, 55, 58, 63, 70, 83 and 100 MM.

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Mack experience in designing sales compelling, deluxe packaging is available without obligation. Consult our packaging experts for complete service.

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Just call or write for fast, capable assistance on standard closures or exclusive custom designed closures and packaging specialties. All standard sizes are available in phenolics, ureas, styrene or polyethylene. Samples and prices on standard stock items will be supplied promptly on request—estimates on specialties will be forwarded upon receipt of your drawings or blueprints. Please address inquiries to Mack Molding Co., Inc., Main Street, Wayne, New Jersey.

**MACK** — supplies all 3 quickly, economically!

.....THREE FULLY-EQUIPPED PLANTS TO SERVE YOU.....  
WAYNE, NEW JERSEY • ARLINGTON, VERMONT • WATERLOO, P.Q., CAN.

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BRASS GOODS MFG. CORP.

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CONN.

Write for Samples



Look for the cover  
ad on **WIRZ**  
tubes in next  
month's...



**Eye Appeal**  
IN WIRZ TUBES  
MEANS MORE SALES FOR YOUR PRODUCT

Illustration shows three tubes of Eye Appeal eye makeup. The tubes are shown in a way that suggests they are being applied to the eyes. The eyes are shown in a series of four, with the first eye looking straight ahead, the second eye looking slightly to the side, the third eye looking more to the side, and the fourth eye looking directly at the viewer. This sequence suggests a progression of appeal or attraction.



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ROUGE COMPACT POWDER  
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also  
FOOT & POWER PRESSES FURNISHED

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FAITHFUL SERVICE FOR OVER SIXTY YEARS

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# Market Report

## Lemon Oil Reported at Record High

**A**S seasonal demands for lemon oil by confectioners and beverage manufacturers grew more pressing, and several incoming parcels from Italy were detained by the Food & Drug Administration, prices for both the Californian and Italian oil moved higher. The price of Exchange Brand Californian lemon oil was boosted from \$6.50 to \$7.25 a pound by Fritzsche Brothers, Inc., and Dodge & Olcott, Inc., co-distributors for Sunkist Growers. The new quotation was reported to be an all-time record high figure for the oil.

Other highlights in the raw materials market included a decided turn in the supply outlook for glycerin, a decline in artificial musks, and prospects of a further possible rise in vanilla bean prices. Menthol displayed an irregular trend over the greater part of last month but price movements were generally confined within narrow limits as compared with the fluctuations noted a year ago at this time.

### Glycerin

Summer plant closings were expected to force July production of glycerin down by approximately four million pounds. This reduction together with a further sharp drop in imports will drop stocks back to about 50 million pounds in the opinion of trade observers.

Stocks of glycerin at the end of May amounted to 53,261,000 pounds according to latest official figures. This compares with 50,479,000 pounds in the previous month, April. Domestic production rose from 18,798,000 pounds in April to 19,822,000 pounds in May. Foreign sources of supply have about dried up following the heavy demands in the early months of the year. Approximately 16,000,000 pounds were imported in the first four months. May arrivals dropped to 1,506,000 pounds from 3,637,000 pounds in April, and it is believed that imports will remain at a low level during August and September.

Some stocks have been accumulating in the Argentine. Based on last reports there should be at least 1,500 tons in that country but local houses have been without offerings and it is difficult to tell whether these goods will be made available for export to the United States.

Mint oils remained on the soft side especially spearmint. Prices eased here and in the country following reports to the effect that distillation of the new crop had started. However, there were some hints in the market to the effect that prices could take a turn since the extended period of dry weather has served to cut into earlier estimates regarding the size of the crop.

The reduction in two artificial fixatives namely musk ambrette and musk xylol was attributed to keener competitive conditions here as the result of lower priced imported material appearing in the market.

### Patchouli Oil Strong

Patchouli oil displayed a greater degree of strength. Reliable shippers in Penang report that stocks of good quality oil are virtually exhausted because of the limited quantity of fresh supplies arriving in Penang from Sumatra. Coastal guards have been keeping a watchful eye on the Malayan Coast for smuggled goods into Malaya. Price movements in spike lavender oil have been confined within very narrow limits but reports from Spain continue to be highly unfavorable regarding the coming crop. The dry spell has had a rather serious affect upon the crop. So much so that some shippers have discontinued offerings pending a clearer picture of the situation.

Difficulty in obtaining replacements of anise oil in the face of government restrictions on licensing of imports on oil from Holland served to strengthen the article. There was no particular increase in the demand for anise oil but, under current international conditions, a generally tight supply situation promises to continue for some time to come. Cassia likewise

remained in a generally tight supply position.

### Aromatic Chemicals Demand Low

Reports from aromatic chemical producers were not particularly encouraging regarding the outlook over the last half of the year. Seasonal influences should bring about a resumption of activity in the market with the passing of the summer vacation period but makers fear that purchases for the account of pharmaceutical, proprietary manufacturers and buyers in other consuming lines are likely to be restricted to small quantities. Prices on several aromatics bear close watching, however, since it is felt that any real demand could result in an upward adjustment in selling schedules to reflect the many price increases that took place in basic chemicals in the second quarter of the year including boron chemicals, alkalies, basic acids, chlorine and ammonia.

After dipping close to Government loan levels, gum rosin prices turned firmer toward the close as the result of a better consuming demand. Orders have proved surprisingly good despite summer vacation closings at some consumer plants. Another strengthening factor in the market was a strike which tied up operations at a wood rosin plant in the South.

Turn of events in vanilla beans proved highly interesting. While some trade factors were inclined to discount the firm reports coming from France and Mexico, prices at primary centers as well as those in the local market continued to rise.

Among the many private advices received here from Madagascar one report by a reliable source stated that green vanilla was in good demand by curers and its price to natives represented a first cost of \$8 without profit. Moreover, buying of green beans had only started but the curing season is not expected to prove of long duration because of the small quantities of green vanilla available.

# PRICES IN THE NEW YORK MARKET

(Quotations on these pages are those made by local dealers, but are subject to revision without notice)

## ESSENTIAL OILS

All prices per lb. unless otherwise specified.

Almond Bit, FPA per lb.	3.40@	3.80
Sweet True	.55@	.90
Apricot Kernel	.45@	.60
Amyris	1.70@	2.00
Angelica Root	68.00@	100.00
Angelica Seed	55.00@	90.00
Anise, U.S.P.	2.25@	3.00
Avocado	1.00@	Nom'l.
Bay	1.50@	2.10
Bergamot	11.35@	14.25
Artificial	3.00@	4.25
Birchtar, crude	1.80@	2.10
Birchtar, rectified	2.55@	2.85
Bois de Rose	4.00@	4.75
Cajeput U.S.P.	2.20@	2.75
Cajeput (technical)	1.75@	2.20
Calamus	18.00@	22.00
Camphor "White"	.25@	.42
Cananga, native	10.60@	11.25
Rectified	12.25@	13.00
Caraway	2.75@	3.35
Cardamon	32.50@	40.00
Cascarilla	35.00@	40.00
Cassia, rectified, U.S.P.	8.00@	10.00
Cedar leaf, U.S.P.	2.15@	3.00
Cedar Wood	.50@	.65
Celery	16.50@	20.00
Chamomile Hungarian	185.00@	255.00
Cinnamon—		
Bark	22.00@	40.00
Leaf	1.35@	3.00
Citronella, Ceylon	.50@	.90
Java	.85@	1.10
Java type	.50@	.68

Cloves, from buds	9.50@	10.00
Leaf	1.80@	2.10
Copaiba	2.10@	2.35
Coriander	18.00@	25.00
Croton	4.35@	5.25
Cumin	4.25@	5.20
Dill—		
Weed	4.10@	4.60
Seed, Indian	2.90@	3.40
Erigeron	6.00@	6.85
Eucalyptus—		
80-85%	.90@	1.20
70-75%	.75@	1.25
Fennel, Sweet	2.40@	3.00
Garlic (oz.)	9.00@	11.00
Grapefruit	2.50@	3.30
Geranium, Rose, Algerian	9.50@	11.25
Bourbon	10.00@	11.40
Turkish	6.00@	6.75
Ginger	11.90@	13.50
Guaiac (Wood)	1.50@	1.75
Hemlock	2.15@	2.75
Juniper Berry	2.85@	3.50
Laurel leaf	9.85@	12.60
Lavandin	2.15@	3.00
Lavender, French 40-42%	6.25@	7.75
Spike	1.60@	2.00
Lemon, Calif.	7.25@	7.50
Italian	6.35@	9.00
Lemongrass	1.05@	1.30
Limes, distilled	6.25@	7.40
Expressed	7.85@	9.50
Linaloe wood	3.35@	3.85
Lovage (oz.)	10.00@	12.00
Mace	3.10@	3.85
Marjoram	3.10@	3.60
Neroli—		

Haitian	75.00@	100.00
French	210.00@	270.00
Nutmeg, East Indies	3.00@	3.50
Ocotea Cymbarum	.70@	1.00
Olibanum	5.60@	7.85
Opopanax	45.00@	48.00
Orange, Florida	.85@	1.10
Italian	3.90@	4.70
Calif., exp.	1.25@	—
Distilled	.80@	—
Origanum	2.15@	2.85
Orris Root, concrete (oz.)	6.50@	8.75
Concrete, extra	12.00	15.00
Patchouli	7.50@	10.00
Pennyroyal, European	2.00@	2.50
Peppermint natural	5.00@	5.20
Redistilled	5.40@	5.70
Petitgrain	2.35@	2.85
Pimento, Berry	4.50@	5.15
Leaf	2.40@	2.90
Pinus Sylvestris	2.40@	2.85
Pumilio	3.15@	4.00
Rose, Bulgaria (oz.)	55.00@	70.00
Synthetic, lb.	30.00@	35.00
Rosemary, Spanish	.65@	.95
Sage—		
Spanish	.85@	1.00
Dalmatian	6.50@	8.35
Sandalwood, N. F.	10.00@	10.75
Sassafras—		
Artificial	.45@	.65
Snake root	30.50@	32.00
Spearmint	7.75@	8.25
Spruce	2.25@	2.75
Sweet birch Southern	2.10@	3.00
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Thyme, red .....	1.85@	2.85
White .....	2.30@	3.10
Valerian, extra .....	85.00@	115.00
Vetivert—		
Bourbon .....	17.10@	20.50
Haitian .....	14.25@	18.75
Java .....	25.50@	31.50
Wintergreen, Southern ..	3.40@	15.00
Northern .....	7.25@	14.00
Wormseed .....	8.15@	8.50
Wormwood .....	5.75@	6.40
Ylang Ylang, Bourbon ..	20.00@	32.50
Haitian .....	12.85@	Nom'l.

#### TERPENELESS OILS

Bay .....	3.00@	3.60
Bergamot .....	20.00@	29.00
Grapefruit .....	80.00@	90.00
Lavender .....	10.00@	14.25
Lemon .....	58.00@	65.00
Lime, ex. ....	80.00@	90.00
Distilled .....	60.00@	62.00
Orange sweet .....	110.00@	135.00
Peppermint .....	13.00@	14.65
Petitgrain .....	5.25@	6.10
Spearmint .....	13.50@	16.00

#### DERIVATIVES AND CHEMICALS

Acetaldehyde 50% .....	2.15@	2.50
Acetophenone .....	1.40@	1.80
Alcohol C 8 .....	1.95@	2.25
C 9 .....	12.50@	13.00
C 10 .....	2.00@	2.30
C 11 .....	13.85@	14.50
C 12 .....	2.75@	3.50
Aldehyde C 8 .....	9.00@	11.00
C 9 .....	16.75@	17.10
C 10 .....	7.30@	7.75
C 11 .....	18.60@	20.00
C 12 .....	15.00@	15.75
C 14 (Peach so-called) ..	6.85@	7.50
C 16 (Strawberry so-called) ..	5.85@	6.20
Amyl Acetate .....	.55@	.70
Amyl Butyrate .....	1.00@	1.25
Amylcinnamic Aldehyde ..	2.05@	2.40
Amyl Formate .....	1.00@	1.25
Amyl Phenylacetate .....	3.75@	4.10
Amyl Propionate .....	1.25@	1.60
Amyl Salicylate .....	.90@	1.00
Amyl Valerate .....	1.95@	2.40
Anethol .....	1.00@	1.35
Anisic Aldehyde .....	2.15@	2.65
Anisyl Acetate .....	6.00@	6.75
Benzyl Acetate .....	.75@	.85
Benzyl Alcohol .....	.75@	.85
Benzyl Benzoate .....	.85@	1.00
Benzyl Butyrate .....	1.75@	2.00
Benzyl Cinnamate .....	3.75@	4.00
Benzyl Formate .....	1.50@	2.10
Benzophenone .....	1.80@	2.25
Benzyl-isoeugenol .....	9.00@	10.25
Benzyl Propionate .....	1.60@	2.20
Benzyl Salicylate .....	1.90@	2.10
Benzylidene Acetone .....	2.00@	2.75
Bromstyrol .....	5.75@	6.35
Butyl Acetate, normal ..	1.14 1/4@	1.5 1/2
Cinnamic Alcohol .....	2.75@	3.50
Cinnamic Aldehyde .....	1.25@	1.40
Cinnamyl Acetate .....	3.75@	4.50
Citral, C. P. ....	3.25@	3.70
Citronellol .....	1.75@	2.30
Citronellyl Acetate .....	2.55@	3.00
Citronellyl Butyrate .....	5.50@	5.90
Coumarin .....	3.00@	3.45
Cuminic Aldehyde .....	3.85@	4.35
Cyclonol .....	2.85@	3.15
Diethylphthalate .....	.45@	.51
Dimethyl Anthranilate ..	5.75@	6.00
Diphenyl Methane .....	1.15@	1.30
Diphenyl Oxide .....	.60@	.75
Ethyl Acetate .....	.30@	.35
Ethyl Benzoate .....	.85@	.90
Ethyl Butyrate .....	.85@	.95
Ethyl Capronate .....	2.40@	2.85
Ethyl Cinnamate .....	2.85@	3.45
Ethyl Formate .....	.70@	.80
Ethyl phenylacetate .....	1.20@	1.35
Ethyl Propionate .....	.90@	1.00

Ethyl Salicylate .....	1.85@	2.40
Ethyl Vanillin .....	6.75@	7.30
Eucalyptol .....	1.50@	1.75
Eugenol .....	2.55@	3.50
Geraniol, dom. ....	.75@	2.25
Geranyl Acetate .....	1.50@	2.10
Geranyl Butyrate .....	4.00@	4.85
Geranyl Formate .....	4.50@	4.95
Geranyl valerianate .....	6.00@	6.75
Guaiac Wood Acetate ..	4.65@	5.00
Heliotropin, dom. ....	3.40@	3.85
Hydrotropic Aldehyde ..	5.90@	6.35
Hydroxycitronellal .....	5.40@	5.85
Indol, C. P. ....	19.00@	19.50
Iso-borneol .....	1.65@	1.80
Iso-butyl Acetate .....	.85@	1.50
Iso-butyl Benzoate .....	1.65@	1.85
Iso-butyl Salicylate .....	2.15@	3.00
Iso-eugenol .....	4.10@	4.85
Iso-safrol .....	2.10@	2.80
Linalool .....	5.40@	6.25
Linalyl, Acetate 92% ..	6.00@	6.75
75% .....	5.75@	6.10
Linalyl Benzoate .....	18.50@	20.00
Linalyl Formate .....	11.90@	12.85
Linalyl Propionate .....	12.00@	13.80
Menthol—		
Brazilian .....	5.80@	5.95
Japanese .....	7.50@	7.60
Racemic .....	4.95@	5.10
Methyl Anthranilate .....	2.40@	2.65
Methyl Anthranilate extra	2.75@	3.10
Methyl Benzoate .....	.55@	1.25
Methyl Cinnamate .....	1.75@	2.25
Methyl Heptenone .....	5.20@	5.85
Methyl Heptene Carbonate	35.00@	40.00
Methyl Naphthyl Ketone ..	3.85@	4.10
Methyl Phenylacetate ..	1.10@	1.75
Methyl Salicylate .....	.58@	.65
Musk Ambrette .....	5.25@	5.45
Ketone .....	5.35@	5.60
Xylene .....	1.40@	1.65
Neroline (ethyl ether) ..	2.50@	2.80
Octyl Isobutyrate .....	4.95@	5.30
Paracresyl Acetate .....	2.20@	2.75
Paracresyl Methyl Ether ..	2.10@	2.75
Paracresyl Phenylacetate ..	4.60@	5.20
Phenylacetaldehyde 50% ..	2.75@	3.25
100% .....	4.10@	4.65
Phenylacetic Acid .....	1.65@	2.25
Phenylethyl Acetate .....	1.60@	1.95
Phenylethyl Alcohol .....	1.65@	1.90
Phenylethyl Butyrate .....	4.20@	4.50
Phenylethyl Propionate ..	3.40@	4.00
Phenylethyl Salicylate ..	4.35@	4.80
Phenylethyl Valerianate ..	5.80@	6.10
Phenylpropyl Acetate .....	3.30@	3.85
Phenylpropyl Alcohol .....	2.70@	3.20
Safrol .....	.80@	1.25
Seitol (oz.) .....	2.65@	3.40
Styrollyl Acetate .....	1.75@	2.50
Thymol, crystals .....	3.10@	3.25
Vanillin, eugenol .....	6.50@	7.25
(Guaiacol) .....	3.00@	3.25
Lignin .....	3.00@	3.25
Vetiver Acetate .....	47.50@	50.00
Violet Ketone Alpha .....	9.90@	10.25
Yara Yara (Methyl ether)	2.35@	2.80

#### BEANS

Vanilla beans —		
Bourbon .....	4.75@	5.25
Mexican, cut .....	4.50@	4.65
Mexican, whole .....	4.65@	5.00
Tahiti .....	4.00@	Nom'l.
Tonka Beans Surinam ..	1.05@	1.30
Angostura .....	1.65@	1.80

#### SUNDRIES AND DRUGS

Acetone .....	10 1/4@	.14
Ambergris, ounce .....	8.00@	17.50
Balsam, Copaiba .....	.85@	1.10
Canada fir, gal. ....	31.00@	33.50
Peru .....	1.35@	1.75
Beeswax, bleached, pure		
U. S. P. ....	.70@	.74
Yellow, refined .....	.55@	.60
Bismuth, subnitrate .....	2.65@	
Borax, crystals, carlot ton	67.25@	91.75

Boric Acid pwd. U. S. P., ton	129.25@	153.75
Calcium, Phosphate .....	.07 3/4@	.08 1/4
Phosphate, tri-basic .....	.07 3/4@	.08
Camphor, pwd., domestic	.57@	.59
Castoreum, nat., cans .....	7.25@	17.00
Cetyl, Alcohol, extra .....	.78@	.80
Chalk, precip. bags, cts ..	.02 7/8@	.03
Cherry Laurel Water, jug, gal.	1.25@	Nom'l.
Citric Acid Anhydrous .....	28 3/4@	31 1/4
Civet, ounce .....	5.50@	10.00
Cocoa butter .....	.71 3/4@	.73
Cyclohexanol (Hexalin) ..	.34 1/2@	.35
Dextrine, white, cwt. ....	8.53@	8.68
Fuller's Earth, Mines ton ..	27.00@	30.00
Glycerin, C. P. ....	.44 1/2@	.44 3/4
Soap Ivy, crude .....	.31@	.32
Gum Arabic, white pwd. ....	.40@	.45
Amber .....	.13 1/2@	.15
Gum Benzoin, Siam .....	3.50@	3.85
Sumatra .....	.38@	.45
Gum Galbanum .....	.80@	.95
Gum karaya, pwd. ....	.18@	.30
Gum Myrrh .....	.38@	.40
Henna, pwd. ....	.26@	.30
Kaolin .....	.05@	.07
Labdanum .....	3.70@	4.50
Lanolin, cosmetic .....	.38 1/2@	.48 1/2
Anhydrous .....	.36@	.38
Magnesium, carbonate .....	.11 1/4@	.14
Stearate .....	.38@	.43
Musk, ounce .....	65.00@	Nom'l.
Olibanum, tears .....	.20@	.25
Siftings .....	.16@	.18
Orange Flower Water, gal.	1.75@	2.25
Orris Root, Italian .....	.20@	.26
Paraffin, fully ref. 122-124	.07 3/4@	.08
Peroxide (hydrogen U. S. P.)		
bbls. ....	.03 3/4@	.05
Petrolatum, white .....	.06 3/8@	.08 5/8
Quince Seed .....	1.00@	1.50
Rice Starch .....	.16@	.18
Rose Flower, pale .....	.65@	.90
Rose Water, jug (gal.) ..	1.25@	1.85
Rosin, M. per cwt. ....	8.40@	8.55
Salicylic Acid .....	.48@	.53
Saponin No. 1 .....	2.75@	2.80
Silicate, 40° drums, works,		
100 pounds .....	1.25@	2.00
Sodium Carb.		
58° light, 100 pounds ..	2.75@	4.52
Hydroxide, 76° solid,		
100 pounds .....	3.70@	4.80
Spermaceti .....	.29@	.30
Styrax Asiatic .....	.72@	.78
Tartaric Acid (250 lb. drums) .....	.37@	.41
Tragacanth, No. 1 .....	2.90@	3.20
Triethanolamine .....	.26 1/4@	.27 1/4
Zinc stearate, U.S.P. ....	.37@	.42
Oxide, U.S.P. ....	.17 1/4@	.18 1/4

#### OILS AND FATS

Castor, refined, drums ...	.25@	.25 1/2
Coconut, crude, Atlantic		
ports, tanks .....	.16 1/2@	.16 3/4
Refined, drums .....	.23 1/2@	.25
Corn, crude, Midwest,		
mill, tanks .....	.13 3/4@	.14 1/2
Corn Oil, refined, tanks ..	.17 1/4@	.17 3/4
Cottonseed, crude tanks ..	.14@	.14 1/4
Grease, white .....	.05 1/4@	.05 1/2
Lard, Chicago .....	.10 1/8@	.10 1/4
Lard, Oil, common,		
No. 1 drums .....	.11 1/4@	.11 3/4
Olive, edible (gal.) .....	2.75@	2.80
Peanut, crude, tanks .....	.20@	.21
Peanut, refined tanks .....	.24 3/4@	.25 1/4
Red Oil, single distilled		
drums .....	.12@	.13 1/4
Double distilled .....	.14 1/2@	.15 3/4
Stearic Acid		
Triple Pressed .....	.13 1/4@	.14 1/2
Double Pressed .....	.11@	.12 1/4
Tallow, acidless, drums ..	.11@	.11 1/2
Tallow, extra .....	.04@	.04 1/4

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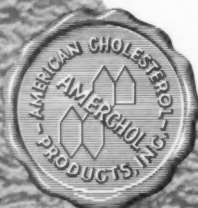
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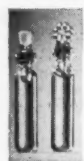
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